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THE PHILOSOPHICAL BASIS OF EDUCATION

ROLAND AND MURMIT NUREVICS

UNIVERSITY OF PHILADELPHIA

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THE PHILOSOPHICAL BASIS OF EDUCATION

By
ROLLAND MERRITT SHREVES,
PH.D., A.M., A.B.

*Head of the Department of Psychology
and Education at the State Normal
School, Kearney, Nebraska*



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TO THE LATE
JOSIAH ROYCE

Whose profound insight into the reality of life has constantly inspired the author of this book to renew his interpretation of human experience, this book is affectionately dedicated.

PREFACE

My only reason for writing a volume under the title of this one is the fact that the present status of things in education seems to me to demand a further clarification of our educational thought and practice. If we were all thinking clearly, and getting the most efficient results possible, there would be no need of adding another to the present stock of books.

It is my belief, however, that clearer thinking is possible, based on the already accumulated experience of mankind. It would be possible to gain much better results and do it more easily, effectively, and with greater pleasure, if we would utilize the amazing power that comes from clear thinking. Now clear thinking is not a secret and mysterious power given to few and withheld from the many, but it is a power each person may possess and make use of in his own experience.

This clearness of thought comes from our ability to utilize to the best advantage our past experience. To do this, we are obliged to make use of our powers of reflection in order to determine the real nature and meaning of our experience. It means little to have experience, but it means much to see by the light of reflection what this experience means for life as a whole. The significance of our experience does not float on the surface, but it takes an experienced diver to bring it up from the depths and mire of isolated and fragmentary bits of human experience. There are experienced divers of pearls and other precious materials, and so there are those experienced in bringing to the light of clear thought the true significance of human experience.

It is in the field of educational thought, as well as in other departments of human knowledge, such as business, religion, domestic and social life, that we are in great need of clear thinking. Clear thinking will lead to more definite and exact methods of habit formation and action. Clear thinking can be induced only through persistent habits of reflection on the data

of our experience. It takes insight to develop foresight. We need more penetration and concentration if we would reach the deeper meaning of our human experience. The meaning and significance of our experience do not rise to the surface like cream to be skimmed off with the crude instrumentality of common sense. Rather it takes the pulling power of reflective thought, of analysis, synthesis, comparison and the like, to bring out this deeper meaning.

It will be the object of this volume to aid as much as its author is able to a clearing up of the thought process, in its relation to the data of our educational experience. It should aid in showing the need for guiding principles and reflective analysis in the field of education. In short it should assist the reader to see the necessity of developing a more systematic and thoughtful way of approach to the great problems of education. If it does this much it will contribute toward the development of a philosophy of education.

The point of view here adopted is that of the idealist and it reflects the voluntaristic tendency in idealism, rather than the intellectualistic. The emphasis is rather on action than on knowledge, and yet the two points of view are here inseparably connected.

It will be noted that knowledge is essential to properly directed activity, and that activity is essential to the best understanding. Knowing and doing are the two aspects of the same psychophysical process and our deeper philosophical reflection will rather tend to confirm this fact than to deny it.

The original manuscript of this book has been rewritten and revised with the idea of making it a suitable text-book for college and normal school courses in the *Philosophy of Education*, or the *Theory of Education*. It ought also serve a valuable purpose as a reference book in courses in *Philosophy*, *Education* and *Science*.

It would be rather a hopeless task to attempt here any adequate acknowledgment of the sources of help and inspiration I have received along the line of the subject here under treatment. My more enlightened conscience and my sense of loyalty to loyalty, as well as my hope of a larger self-realization, urge upon me the mention of a few names at least. I could not fail to mention Professor Josiah Royce, whose wonderful

power of penetration helped to lead me into a field of larger truth and reality. Nor should I fail to mention Professor George Herbert Palmer, who made life's ideals a matter of serious consequence to me. I have come through his teachings to regard man's highest calling and duty that of pursuing worthy and noble ideals. Ideals are not realizable unless we know the means of realizing them. And just here the wonderful world of psychology was opened up to me by that eminent psychologist, Professor Hugo Münsterberg.

I owe much to other teachers and to scores of authors but I cannot mention them here, and I sincerely hope that the writing of this volume will not cast discredit on those whose names I have mentioned. The book that has meant more to me than any other I have ever read is Royce's *Philosophy of Loyalty*.

I am indebted to my wife, Anna E. Shreves, for her patient labor on both the Index of Names and the Index of Subjects and for other helps with the manuscript.

If there is anything in this volume that will contribute to higher, nobler, and deeper thinking in regard to our educational experience, I shall feel that my labor has not been spent in vain.

R. M. SHREVES.

Kearney, Nebraska

December 1, 1917.

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INTRODUCTION

1 THE AIM OF THIS VOLUME. The specific Aim of this Volume as the title implies is to trace the educational implications of Voluntaristic Ethics. It is not meaningless to ask, What is the significance of Ethics for Education? What is the Ethical Aspect of education? Especially these questions have meaning if we start out on this journey of thought with the metaphysical assumption of the unity of knowledge. We have not time, nor is this the place, to trace the metaphysical or epistemological implications of this assumption. We shall, however, set out with this assumption as part of our equipment. As we journey along we hope to point out the reasonableness of this assumption but our great task is to show what ethics has to do with education.

2 THE POINT OF VIEW HERE TAKEN. In showing the relations of ethics and education, or the educational implications of ethics, two alternative methods of treatment are possible. The historical method might be adopted and the several ethical systems shown up in their relation to education. Again the philosophical view might be taken and the underlying meaning of these relations might be traced in their deeper significance. The latter is the point of view here adopted. It will be my aim to follow up the fundamental principles of ethical theory and show the educational implications of these.

It has already been stated that my point of view is all the way through that of voluntaristic idealism. Thus the work is ethical rather than pedagogical, yet it is intended by showing the meaning of the leading Ethical principles of idealism for education to be of value in a pedagogical way. As it has been briefly stated the object is to contribute to clearer thought in education, and this is to be brought about by the observance of certain ethical principles, as well as by the use of more scientific methods in education.

3 THE NEED OF SUCH A WORK. There is a sad lack of adherence to well thought out ethical principles in education. We have scarcely taken time to look within our Education to see what it is all about. We are still like children and pay more attention to things that move about us than to the laws and principles that govern our nature. Perhaps we should not be too harsh for it is only an evidence of our immaturity. But individuals grow older and so do nations, and when we reach the period that the reflection and insight begin to develop, we should make use of these powers in promoting the welfare of man and society.

This present age of ours is best characterized as the age of industrialism and commercialism. It is the age of rapid developments along these lines, and progress here has been made possible mainly through recent developments in the physical sciences. This is an evidence of the objectivity of our individual and national mind.

We find the present age in which we live making strong demands on us from without, and scarcely any pressure to bring about the development of the inner man, except in so far as this is the natural consequence of this progress in a material way. Certainly this material progress has had great value in giving expression to a larger life, but the life that is developing is not always consciously assisted in its advance, but rather follows as a natural and fortuitous consequence of the larger social and economic sphere in which recent years find us moving.

✓ But the ethical life of man demands more conscious and rational guidance than this. Not only must the sphere of activity grow larger, but there must be conscious guidance from man's moral nature within. There is a call from the great within as well as a pressure of economic and social necessity from without. We are in danger under the exaggerated pressure of necessity to live too much in the present and to give too little attention to the demands of a truly purposive life. Stevenson must have had a similar thought when he said, "And when the present is so exacting, who can annoy himself about the future," and this exacting circumstance of external necessity has continued to act for a long time. When man loses sight of a higher goal he will seize a lower one. His

nature demands a goal, a purpose. Progress of any kind demands a goal toward which movement is directed. And our goal will be low or high, worthy or unworthy, according to the kind of persons we are. The best way to estimate a person or a nation is to observe what ideals are pursued and the pulling power these have on the life. All ideals have pulling power, and they sometimes pull at cross purposes. They should rather point to an ultimate purpose in which they all unite in a higher unity, a deeper meaning and reality.

Our ideals would, if they are what they should be, lead us to love and be loyal to our fellows and their true purposes, and this would be vastly better than to go out to battle against them. The right ideals will lead men to unite against evil, waste and inefficiency, but not to kill each other. The present great war that threatens the entire world is a symptom of a sadly diseased condition of man. I do not think this is an indication that man has fallen from grace; rather it looks as if he had never worked himself into very good favor with his God yet.

There are many evidences besides war that suggest man's inhumanity toward man and his undeveloped nature. Strife and destructive competition in industry, the chasm between labor and industry, capitalist and wage earner, are other evidences and perhaps follow as a natural consequence upon our exaggerated emphasis of the industrial and commercial ideals of our age.

And yet we see constantly an undercurrent moving in a different direction. This deeper view and its significance for life is not always observed. Man must train his reflective powers to see the deeper movements and tendencies in life as well as to select the proper goal of life. Indeed this is the only correct way to select his goal at all.

We could not afford to lose a single inch gained by industrialism and the material progress of our age. We need all that has been gained and much more. But we cannot gain all that is needed in our life by advancing along these lines, for this only produces more wealth and leisure without greater power of enjoying either. Under such a régime our wants and desires develop much more rapidly than the truer and higher self to which these instrumentalities should minister.

There has been a rapid growth in the demand for luxury in this our industrial age, and it is not to be discredited so long as we know what we are doing and keep the balance of our ideals that the higher ethical life demands. While we are noticing the trend in this direction there comes the cry that, "In the face of a growing desire for luxury and ease, there must be a conscious effort to cultivate thrift, simplicity, and a more spiritual sense of values." (Trowbridge: *The Home School*, p. 27.) And this demand is quite as urgent as that for luxury. Let us keep our balance so far as possible and welcome any suggestion that gives a better insight into the true meaning and values of a higher life.

✓ It is the business of ethics to reveal the higher values and purposes of life, it is the duty of man through his personal efforts and through the agencies and various institutions of society to strive to the uttermost to realize these ideals and purposes. In this book we are directly concerned with the true ethical aims and values of life, and with the demands thus placed upon the schools as an agency in realizing these ideals and purposes. But we well know that the degree in which we can expect the schools to realize the higher purposes of life is determined largely by the nature and effectiveness of this organization within itself. Unfortunately the American public schools are not a well organized system. They have developed piece-meal and there has been little effort to correlate the parts into a well organized whole. Indeed it will take several decades to systematize our education. But happily there are evidences of growth in the direction of better organization. And there is room for considerable development yet. The unscientific patch-work of our American education is well put in the following quotations.

William T. Harris in his preface to Boone's *Education in the United States* (p. 6) says: "States first establish colleges and universities and next free common elementary schools, and afterwards gradually fill in intermediate links of the system, and then add supplementary institutions." J. F. Brown in his *The American High School* (p. 366) says much the same thing in the following words: "Historically the American schools have developed from above downward and from below upward, meeting in the middle. It is difficult to see how the

evolution of American education could have been different from what it actually has been; but the time has certainly come when we should begin at the bottom and rebuild our public educational system to the top. The guiding factors in this important work should be a sound psychology and a sound philosophy considered from both the individual and the social point of view. Philosophical and social ideals will help us to define the aim of education, psychology will teach the steps by which that aim can best be attained; both will assist in determining the best educational content, that is, the curriculum." Now it should be mentioned here that the seriousness of this crazy-quilt style of American education becomes evident when we remember that it is the business of this institution to realize in the fullest measure possible the greatest purposes and values of life, in other words the highest or best life. Lest it be thought that I have placed too large a burden on education I here quote a passage from *The School and Society Magazine* (Vol. I, p. 37), which reads as follows:

"In our industrial, social, civic, and religious democracy everything waits on education. No real progress and no lasting improvement in any line of life is possible except through the better education of the people. The deepest meaning of democracy is equality of opportunity. This is impossible without equality of opportunity for citizenship, and for productive occupations. Therefore the right education of all the people becomes our chief concern, and to provide better and more adequate means thereto must be the most important task of society and state. Among the agencies of education the public school may, I believe, fairly be considered the most important."

From the foregoing it ought to be evident that more clear thinking is needed in order to eliminate the crudities of modern education and make our schools more effective instruments for good in the hands of society. Our very first duty is to clear up our minds as to what is our aim in education. Educational aims are the very first consideration in education. Nothing can be placed before aims, or ideals, in education,—or in any other field of activity. It is interesting to note that Harrington Emerson insists vigorously on "Ideals" as the first of the "Twelve Principles" of industrial efficiency. Just so it is in

education. It is time we were clearing our ideas as to the goal or purpose of education. There are no short-cuts in settling this matter. The task can never be settled except by clear and deep thinking along ethical and general philosophical lines.

It is not thought that ethical reflection alone will solve all the problems of education. It cannot. The aim of ethics is less ambitious than that. It can only give a point of view, and as R. L. Stevenson says, it is a point of view rather than points of view that we are so much in need of to-day. But the battle is half fought at least when we are clear as to the aim of education.

When it comes to a matter of deciding what are the means or methods to be used in education we are no longer concerned with ethics, but must turn to the descriptive sciences such as psychology, biology and sociology for help. But this distinction between the function of ethics and the descriptive sciences is not so evident that it can be passed by with a mere mention. It will occupy much of our time in this book to make clear this important distinction, a distinction without which no clear thinking on educational problems is possible, and without which progress is uncertain and unscientific. But we have had enough uncertainty in education. Let us now use our best efforts to avoid past blunders, rule-of-thumb and trial-and-error methods. Can't we see yet that aims are the first consideration in education and means and methods serviceable only when we know what ends we want to accomplish? What would you think of a tool maker who set about making a tool without the least idea of the use it was to be put to? What shall we think of ourselves if we continue to develop means and methods without knowing what ends they are to serve? Or, may it not be that we already know the ends but that we have not questioned the value of these ends to see whether they fit into a larger system of things? Perhaps they are working at cross purposes with one another. In which case there is danger of friction and lost motion, which means a reduction of efficiency. It stands to reason that we should not become less efficient than we are. It takes a certain amount of genius to overcome our inertia to the extent of re-thinking and re-shaping our educational aims and methods.

4 THE PLAN OF TREATMENT. In order fully to develop the point of view here taken it is thought best to divide the book into five parts, showing in each part a different point of view from which we might regard education. In Part I we discuss *The Aims, Scope and Methods of Science*, ending with a chapter on the relations of science to life. In Part II, *The Aims, Scope and Methods of Philosophy* will be discussed, concluding with a chapter on the relations of philosophy to life. In Part III, we enlarge our field by showing *The Relations of Science and Philosophy*, thus clearing the way finally for a separation of the two points of views, scientific and philosophical, the descriptive and the normative, so that we may give greater emphasis to the special problems set for us, that of showing the educational implications of modern idealism. In Part IV, we consider *The Relations of Philosophy and Education*, and prepare the way for a transition to the special point of view of the ethical philosopher. In Part V, we work out some of the more fundamental relations of the ethics of modern idealism and education. In this part will be seen the more important implications of the ethics of voluntaristic idealism for modern educational theory.

It is to be hoped that the reader will enjoy the journey with me through the fields we are to travel, and that we shall each be the better for having had the other's company. We first enter the field of science and this that we may gradually and with a clearer vision enter the deeper fields of inquiry to be studied later.

PART I

THE AIMS, SCOPE, METHODS, AND RELATIONS OF SCIENCE

THE PHILOSOPHICAL BASIS OF EDUCATION

CHAPTER I

THE AIMS OF SCIENCE

I SCIENCE AS OBSERVATION OF FACTS. What is the scientist trying to do? What is he making so much fuss about now-a-days? Everybody hears about the scientist and about science, and most of us have been forced to give ear to him, but what is he trying to do? What is his aim, purpose, or goal? Does he have a work that no one else is to accomplish, or is he merely exaggerating his own importance?

These are questions of moment, for everybody has been forced to listen and now it is time we are being told what it is all about. The scientist is on the alert to-day. He is ambitious to do great things. Indeed he is so alert that there is danger in thinking him either overwise or a fool. But we like energy and ambition when it does not interfere with our personal prejudices or traditions of too long standing. The scientist is gaining attention because he is really found to have a message. We can look on every hand and see the wonders of his works, but do we really understand what his aim is?

It might be said that in general he has two aims, theoretical and practical, but this would not do full justice to him. We want to know more in detail what he would accomplish in life. Indeed the foregoing statement would likely be very misleading, for generally the sciences have developed rather far before any effort has been made to show their practical usefulness in solving the problems of life.

Science aims at a careful, descriptive, and explanatory ac-

count of experience. Observation is the scientist's first task. He must observe carefully, record and verify by repeated observation and experiment the data he collects. He gets all his facts from the realm of human experience, forcing none of it in from another world foreign to our own. Science starts with facts of experience and ends with a complete descriptive and explanatory account of these. In the case of applied science we go a step farther and show how the laws and generalizations of science are to be used in the solution of the problems of life; in other words, how these laws can be made useful in modifying our future, or in controlling our experience.

The factor of careful observation is so important that we are scarcely liable to overestimate it. There are so many of us who have eyes and see not, ears and hear not, brains and mind, and think not. We are in need of greater observation and attention to the world about us, to the facts of our experience. We make our own world by attending to that which we will, or to that in which we are interested, says James. But so many of us will do little and are interested in such a small way, that we really ought to be ashamed of the world we do make. Closer observation, greater attention, and a habit of recording and verifying our experience carefully would result in making a more habitable world for most of us. Let him who thinks otherwise try it consistently for a time and see the new meaning that life takes on as a result.

2 SCIENCE AS CORRELATION AND CLASSIFICATION OF FACTS. But it is not enough that we observe and record the data of our experience, we must classify and correlate them as well. Merely to observe and record is to lose sight of the deeper likenesses, and to aid in making our world disconnected and uninhabitable, even for the most religious of us. All unity is lost in isolation of facts from one another. One fact does not stand alone. In reality a fact of experience is rather an arbitrary thing and amounts to a certain dependable unit of experience. Of course there is a deeper meaning of a fact of experience, the inner meaning of this fact or idea, but this is not the stage of our inquiry to unearth metaphysical problems, and especially since science has no stock in this kind of business.

Facts are merely units of experience conceived as objective and belonging to a time and space world. They are in this sense not metaphysical realities, whatever sort of reality we may decide to attribute to them. So disregarding metaphysical difficulties we may here safely say, that for science a fact entirely isolated from all other facts has no meaning or value, and no existence. Facts are significant only in so far as they point to a larger unity, a wider scope of relation. Science, then, must not only observe, but correlate and classify its facts on the grounds of their likeness or similarity. It is only in this way that facts may lead to generalizations, and laws.

3 SCIENCE AS DESCRIPTION OF FACTS. The scientist must also describe his facts as well as observe, classify, and correlate them. That is, he must make his facts understandable. They must not be confused with others, but have a character of their own. Facts have an identity for the scientist which is not lost by being merged in the whole, but they do gain greater significance when so related. In description we do not go beyond the pointing out of likenesses and differences between facts and showing their relation to a larger group of facts.

4 SCIENCE AS EXPLANATION OF FACTS. Another aim of science is to explain the facts. And this it does by showing their relation not to other facts but to laws and principles, which are based upon facts similar to the ones to be explained. We mean nothing more by scientific explanation than that of showing that this particular fact of experience falls under such and such a law of experience already determined scientifically, that is, through the procedure already described in this chapter. Explanation is thus the process of showing how a fragment, or element of our experience is related to a larger group of experiences. In other words, by explanation we mean simply pointing out the general law under which a given fact of experience falls. There is no attempt in this process of scientific explanation to go beyond the actual time and space relationships in which, as elements of experience, they are found. That is, there is no attempt on the part of the scientist to give the absolute meaning of experience, either in whole or in part. He is satisfied to live and think in a world of time and space.

He does not even try, so long as he is true to his calling, to transcend these temporal and spatial boundaries of the world of fact. He is not concerned with the deeper meaning and relation of facts in a world to which the philosopher ascribes reality in a metaphysical sense. The world for the scientist is the same time and space world as for common sense. But of course there is nothing in the nature of things why a scientist may not also take the view of common sense, or the philosopher too, but he must be careful and not mix these points of view, when he is trying to give a scientific account of the world.

The scientist works in both the mental and physical fields and so has to explain how both sets of facts are related, each in its own way. Whether the facts be material or mental,—and for science facts are both material and mental despite their metaphysical unity in a larger system of realities,—they must be explained. And explanation everywhere means pointing out the relation between the particular and the general, the fact and the law that throws light on it from above. Just now there is started in my mind a new set of ideas aroused by that ubiquitous and joy-bringing invention, the graphophone. This is the mental fact. The explanation of this fact lies in pointing out how these ideas are related, or associated, and this is done by pointing out the relation of the ideas themselves to the physical processes which accompany them. The law here in operation is that of psycho-physical parallelism, which points out the larger relations between body and mind. Laws of lesser generality are operative too, but my point here is to show what is meant by explanation in a general way.

5 SCIENCE AS GENERALIZATION AND LAW. The highest stage of purely theoretical science is reached when the facts are so grouped and related as to lead to generalizations and laws, or principles. Explanation assumes that the stage of laws and principle formation has been reached. Often the law or principle is assumed rather than proved to form a starting point. In this case the generalization is called a postulate, or an hypothesis, and must later be supported by fact before it can stand as a law or principle. Sometimes the nature of the hypothesis is such as to preclude the possibility of being supported on the basis of fact or evidence; in which case it is said

not to be logically supported. In a metaphysical sense such an hypothesis would not be true or real, and ethically it would be unjustified on the grounds that it did not accord with the nature of goodness.

The fact of the certainty of the law is then a very important matter for the scientist. He must use all precaution in getting, classifying, and explaining his facts, and to this end his generalizations and laws must be well founded on fact, and constantly verified by experience, and always pliable so as to admit of a wider statement of fact. A principle and a law differ in that the law may be disproved by the fact, but the principle does not stand in such a relation of dependence on fact. The principle must accord with a larger system of reality and to do so may often give evidence of contradiction with fact.

It is not until the method of science became inductive that any very substantial progress in science was made possible. But since Bacon's time this method has yielded many wonderful results and many of them in the form of laws and principles.

6 SCIENCE AS APPLICATION-APPLIED KNOWLEDGE. But the greatest gain was not made when the scientist discovered his many laws and principles. It was not until the practical motive began to operate that he could either prove the worth of his theories, or himself to the world. He has now justified himself in the world of which he gives an account. We see on every hand evidence of the wonderful works of the scientist. We can no longer look upon the scientist as an impostor, or as a mere disturber of our long-standing religious beliefs. His work is greatly needed and his point of view cannot be ignored. It must be reckoned with in the world of practical affairs. Indeed we shall see that the world of truth, beauty, and goodness must start with the world the scientist has evolved. Nowhere can we afford to neglect the great accomplishments of science.

The greatest contributions of science so far have been made to the industrial and commercial world, the field in which our life is perhaps best reflected to-day. As instances of progress in these material ways let us mention the "Seven Wonders" of American industry. I mention first the Panama Canal, that greatest feat of American engineering. No less great in their

own way are the New York railway terminal; the New York Canal; internal waterways and irrigation projects; the subway and the skyscrapers of New York. (I am indebted to Harrington Emerson for the "Seven Wonders" above mentioned.)

Thus it will be seen that the once theoretical sciences of physics and mathematics have become preëminently practical. The same is true of chemistry and other sciences. But theory will continue, and it must precede practice by a good many furlongs. To be sure, practice aids theory, and makes it both more certain and more valuable. Theory and practice tend to support each other. They may cripple each other. All depends on the kind of theory, and how it is related to the facts of experience. There is no conflict between theory that grows out of experience and practice itself. It is through theory that practice becomes enlightened and sees where it is headed. Theory is the reflector that throws light and significance on the facts of experience, and it is the projector that lightens up the way ahead so that experience comes to have a meaning.

7 THE AIM OF SCIENCE STATED IN FULL. The aim of science, then, is to render a complete and accurate descriptive account of our human experience. This account is limited in its scope and value in that it is not intended to be either complete or final. The scientist aims at a purely descriptive and explanatory account of the world. He starts with the world of fact, and from these he works up to laws and principles, which are later applied in the solution of the practical problems of life.

8 THE WORLD OF SCIENCE AS THE WORLD OF DESCRIPTION AND EXPLANATION. But a mere descriptive and explanatory account of experience falls short of giving to life any meaning or real significance. It is not facts that give life its meaning, nor is any greater meaning attached to laws and principles, for they are only generalizations, or statements of the way that certain groups of facts work under certain specified conditions. But all this account is external and the deeper meaning of the facts is not revealed by any such an account.

It would be difficult metaphysically to see how a descriptive

account of the world and experience could reveal life as having a meaning and a purpose, if the facts, which are the data of experience, have no such meaning involved in themselves. Merely tying together meaningless fragments of life does not give us a way of viewing life as purposeful. Science is no less valuable because it does not give the deeper meaning of life. This is not its business. Indeed the progress and hope of science rest in just this impartial and descriptive account of experience. The field of science is the field of the "is". Science starts with facts and ends with laws and principles governing these facts in a time and space world. It cannot go farther than this and remain true to its purpose and has mixed two points of view, the descriptive and the normative, but by common consent and agreement the scientist has come to take within his field only facts and to hand them back to the world as facts, not isolated and unrelated, but as united in most interesting ways. He gives the facts back to society purified and renovated of most of the crudeness which they possessed when delivered by common sense.

9 THE WORLD OF DESCRIPTION VS. THE WORLD OF APPRECIATION. If we are to get a full account of our experience, what is needed more than common sense and science? The answer is—philosophy. It is the business of philosophy to do just what a great many people still try to force science to do, and that is to show the meaning and value of life. This science can never do, any more than philosophy can rest satisfied with a descriptive account of the world. It is one thing to describe and explain; it is quite another thing to interpret and show the meaning and value of our experience for life as a whole. Science develops the one point of view and philosophy the other. They are not essentially different in their aims. The difference lies in the fact that science leaves the world as described and related phenomena, while philosophy begins with the conclusion of science as its data and passes on to give a fuller account of experience by showing the meaning of all this for life.

10 SUMMARY OF THE AIMS OF SCIENCE. Let us briefly summarize the aim of science. Science by observation, corre-

lation and classification, of the fact of experience aims to render a complete and accurate descriptive and explanatory account of the world of human experience. The account is descriptive rather than normative, for the reason that the conclusions relate to the world as it is, and not as it should be. For a fuller account of life we must turn to philosophy, but before we do this it is our business to speak in detail of the scope or field of science, in order that when a division of the field of human experience is made later between science and philosophy we may have a better understanding of the principles upon which the division is based. Let us consider, then, the special field or scope of science.

CHAPTER II

THE SCOPE OR FIELD OF SCIENCE

I THE PHENOMENAL WORLD OF TIME AND SPACE. From the foregoing chapter we learned the special aim of science as that of offering a descriptive and explanatory account of our human experience. From this as our starting point in this chapter, it is but a slight transition to a statement of the scope or field of science. We have seen already that the scientist is not dealing with matter foreign to our life, but with the very facts of our experience as his data, or materials. And now we are not only to state that the range of science is the whole range of human experience, but we are to grow more specific in our statement as to what we mean by the range of human experience.

We are still, however, in the field of the phenomenal world, or the world of time and space, the fact world. This must not be lost sight of, for it is the most essential guide post to our further statement of the world of science. And this point of view must be clearly seen if we are later to see the relations between science and philosophy and the relation of each of these to education.

2 THE SPECIAL FIELDS OF SCIENCE. For practical purposes the field of science has been divided into a number of special fields, and developments are now made along each one separately. Gradual growth and development has led to this differentiation of function, or division of labor, among the scientists, and this division has been brought about as a result of the specialized interests of our individual wills. We shall see later that the whole creation of science is the product of the demands of our practical will, or the concrete expression of a life of purpose. The scope of science must be broad enough to include the special fields of all the subordinate sciences. Shall

we look for a moment at the special fields, namely, the physical, biological, sociological, and psychological?

3 THE PHYSICAL SCIENCES, CHEMISTRY, PHYSICS, GEOLOGY, ETC. The physical sciences have their aim giving a complete descriptive account of the facts of experience, so far as these are yet analyzed, in the world of inorganic matter. This field includes the special sciences of physics, chemistry, geology and allied sciences, and their applied forms. These sciences are alike in that they all attempt to describe and explain the facts of human experience. They are unlike in that each science has its special aim and field, or range of facts which it considers.

4 THE BIOLOGICAL SCIENCES. The biological sciences have the same general aim as all science, to give a description and explanation of the facts of experience. But here the facts lie in the organic rather than in the inorganic world. The special sciences in this field are botany, or the science of the plant as a living organism; zoology, or the science of the animal organism; and physiology, or the science of the human organism. It will be observed that the biological sciences deal with life, or the organic world; while the physical sciences deal with the inorganic, inert world of matter. These two fields divide between themselves the whole world of material science. The biological and the physical sciences are alike in that they deal only with matter and not with mind. The sciences of mind must now be mentioned in their relation to the whole field, or scope of science.

5 THE SCIENCE OF PSYCHOLOGY. The field of psychology is the whole range of consciousness, whether in plant, animal, or man. And in this great field are found many divisions, but the aim is always one, and consistent with the aim of science generally. The special aim here is to give a careful and scientific account of the states of consciousness in their relation to each other and to life. The aim is not to show the meaning of our ideas for reality, but simply to give a descriptive and explanatory account of them.

Here the difficulty of explanation is much greater than in

the physical and biological sciences for the reason that the causal relationships cannot be discovered between ideas, or states of consciousness, in the same way as is possible in the material world. One idea is not the cause, and another the effect. The relationship is not traceable between states of consciousness. The demand for explanation of mental phenomena, then, must be satisfied in quite a different way. This is done by the hypothesis that every state of consciousness has a corresponding physical process, and receives its explanation by relating it to the proper physical or nervous process, called neurosis, and each psychosis is explained by reference to the neurosis that forms the other side of the psycho-physical process.

The only way that a scientific explanation of the states of consciousness is possible at the present time is by relating each mental process to a process of nerve action. This explanation is not causal, nor is it teleological or ideal, it is explanation through correlation. The action is none the less intelligible as explained by this psycho-physical correlation. And it is greater intelligibility that science tries to give to the world, through analysis, synthesis, and explanation. Science tries to make the world in which we live rational, orderly, and thus intelligible. This is the demand of our will to live, giving expression to itself in a practical and concrete way.

6 THE SOCIAL SCIENCES—HISTORY AND SOCIOLOGY. The social sciences also aid in giving to the world greater rationality and order. History and sociology have here a great work in explaining social phenomena. In the past, history has been too descriptive at the cost of intelligent explanation, but this only indicates the puerility of this science, and suggests that the final history neither of the world nor of any part of it has yet been written. If history is to be merely descriptive it has no hope of becoming a science. If it is to be explanatory as well, and this is essential to its being a science, it cannot afford to leave us to guess the cause of the phenomena with which it deals.

Sociology is also young as a science. It would not even deserve the name of a science if its intentions were not so good. On faith we may, then, regard it as a science of the future, and its field will be to describe and explain the phenomena of social or group life. It must show the laws operative in the forma-

tion and maintenance of the group relationship. In as much as these laws must necessarily be psychological, sociology must draw heavily on social psychology. In fact this is about as far as sociology has gone to-day. It will certainly make more independent advances in the future. It must gather carefully its own data of social life, and classify, correlate, describe, and explain these phenomena.

7 THE ABSTRACT SCIENCES OF RELATIONS—MATHEMATICS AND LOGIC. The abstract sciences of mathematics and logic deserve special mention in any attempt to classify or group the sciences now known to man. These are not physical, psychical, or psycho-physical, in as much as the data of both these sciences are not things or ideas, but pure relationships. In the case of mathematics time and space relationships are the elements involved, the phenomenal world is the basis. In the case of logic ideal relationships are involved, or the truth of our ideas and thought constitutes the ground of its search. Logic, however, goes beyond the limits of mere description and explanation and has a teleological reference. We must then leave a further statement regarding logic to a later part of this volume.

Mathematics is the science of time and space relations. Its data are simply these immaterial relations. It is thus an abstract science, or in a sense ideal. The aim of this science is, however, consistent with the aim of science generally, that of giving an explanation of the world in which we live, so as to make it more consistent, less fleeting, and more intelligible.

8 THE NORMATIVE AND DESCRIPTIVE SCIENCES. There is another great and important group of inquiries often called sciences, but their aim is so different from all the groups mentioned above in this chapter under the head of descriptive sciences, that careful distinction must be made here, even though we must be very brief. I refer to the philosophical disciplines, or the several branches of philosophy, namely: metaphysics, epistemology, logic, ethics, æsthetics, and philosophy of religion. These are sciences in that they have their own respective fields of enquiry, and collect, systematize and explain their respective data. But all this is incidental and preliminary to the real

purpose of these sciences, which is to show the meaning of all this for life. It is meaning here and not pure description and explanation that we are seeking. In distinction from the descriptive sciences these are called normative, and particularly for the reason that each one sets up a standard, so as to give meaning and value to life. The word normative means a standard or norm.

Metaphysics gives us the nature and standards of being and reality; epistemology, the nature and standards of knowledge; logic, the standards of correct thinking; ethics, the nature of goodness and the standards of conduct; aesthetics gives us the nature and standards of the beautiful; philosophy of religion, the standards of right religious conduct and belief.

9 SUMMARY OF THE SCOPE OF SCIENCE. The scope of science can easily be seen from the foregoing eight sections of this chapter. The field of science as here used means the descriptive sciences. When the philosophical sciences of section eight are referred to, I shall speak of them as normative, or call them by their special names.

We have observed already that the field of science is very broad in that it includes the phenomenal world of matter, the physical and biological sciences; the world of mind or consciousness, the psychological world; and the world of mind and matter, in their relations, psycho-physics; and finally the world of pure and abstract relationships of time and space ideas. In its broadest significance science includes the philosophical disciplines, which we have called the normative sciences.

Now that the aim of science generally and the special aims of the different sciences have been discussed, and the scope or field of science has been rather lengthily reviewed, we are next to pass in review the general and special methods of science. This will pave the way better for a later separation of the two points of view in regarding the world, the descriptive and the normative.

CHAPTER III

THE METHODS OF SCIENCE

1 OBSERVATION, CLASSIFICATION, DESCRIPTION AND EXPLANATION AS STAGES OF DEVELOPMENTS RATHER THAN METHODS OF SCIENCE. From the foregoing two chapters it will be seen readily what the general methods of science are. It is, however, necessary that we gather together here for our specific purpose these several methods and suggest their limits and values in giving an account of the world of experience, for it is only after we see clearly the place of science in life, that we can see definitely what is reasonable to expect of it, and what must be left for philosophy.

It is now time to point out that observation, classification, description, and explanation, which were discussed in Chapter I, are to be regarded as stages in development of complete science. They are not methods in any technical sense, but more immediate aims, or stages, in the realization of a complete scientific account of the world of experience.

There are several methods at the disposal of the scientist. These are analysis and synthesis, induction and deduction, experiment and introspection.

2 ANALYSIS AND SYNTHESIS AS METHODS. Analysis and synthesis will be treated together because the contrast in their method of procedure throws light on the real value of each. By analysis is meant the separation of any experience or object of experience into its elements. It is an effort to understand the whole better by better understanding its parts and their relation to each other. But to analyze a complete experience into its parts and leave it in this shape, is to rob it of the little meaning it did have for common sense. It is not enough merely to analyze or dissociate our experiences into their elements. We must unite them again; they must be synthesized. Analy-

sis and synthesis are correlative and co-operative processes or methods. Each adds clearness and significance to the other. Through the function of consciousness in the acts of analysis and synthesis of the elements of our experience there develops a new understanding. Experience takes on a greater aspect of rationality or unity, i.e., becomes more intelligible, for only that which has unity is intelligible to us.

Common sense takes experience in the unrefined form in which it presents itself to our perceptions. The scientist begins with this common sense world of perception and tries to refine it and make it more intelligible. This he does by means of the special methods at his disposal.

Analysis and synthesis must go on together. They are the two aspects of a larger process. It would be folly to ask which is the more important, just as it would be to ask which is the more important part of a circle, the inside or the outside,—they are equally essential to the whole.

3 INDUCTION AND DEDUCTION AS METHODS. Induction and deduction are two other methods, closely related to each other and to the methods of analysis and synthesis above discussed.

By induction is meant the process of reasoning by inference from the concrete to the general, from the individual to the universal, from the part to the whole. This pair of methods is inseparable and marks a stage of development in science beyond that of analysis and synthesis of the elements of our experience, and indeed each of these processes employs the methods of inductive and deductive inference.

By deduction is meant the process of inference where the general direction of thought is from the general to the concrete case, from the universal to the particular, from the whole to the part. Through inference in these two ways we arrive at judgments both universal and particular. And it is through our ability to form judgments that we are able consciously to adjust ourselves in a world of practical experience, and to ascribe meaning and reality to this world also. But judgments arrived at in the world of science are never to outstrip the *evidence* of the facts upon which the judgments are based. The judgments must always be open to correction and revision

necessitated by a larger experience. The laws of science are judgments asserted in the form of a universal practical judgment, and must always stand ready to include the widest range of fact. The law must always be verified and supported on the basis of experience. Scientific judgments always refer to a time and space world, to the phenomenal world, and never assert or deny reality to the world.

But the same methods of inference, induction and deduction, are able to carry us over into a very different world from that of perception and phenomenality,—into the world of truth, reality, goodness, and beauty. Yet it is not the business of the scientist to go so far in his inference. To be sure he makes use of hypotheses and suppositions that his science cannot prove, nor is it the business of the descriptive sciences, but the philosophical, or normative sciences.

The scientist, then, in his use of induction and deduction limits their use to the world of time and space, to verification and proof by reference to the facts of experience. The logician extends his limits to the world of truth, reality, and values.

4 EXPERIMENTAL METHOD. The experimental method is the one that best characterizes scientific procedure to-day. Until the time of Bacon the progress of science was very slow and uncertain, and the chief trouble was with the method, because the material of science has always been the same—the facts of human experience. But there has come a narrowing of the field of science with this method, for it is of service as a method only in the time and space world,—the world of perception and phenomena. So it is too indefinite, as we have already seen, to say that science deals with human experience. So does philosophy deal with human experience, and we are now working in the direction of a rather sharp division of the field of human experience between science and philosophy. Science is concerned with human experience only in so far as the data of the same can be classified, described and explained in causal or sequential order. When the field of science is thus limited it becomes apparent that the experimental method becomes of great value.

The experimental method is used wherever it is found possible to standardize conditions and operations, so that the given

phenomena can be reproduced and studied at will. Under such condition we can vary the modifying factors or set of factors exerting the most positive and direct effect upon the phenomena studied. We can thus discover the variant and learn the law of its variation.

The experimental method has now come to be used in practically every descriptive science known to man. It was not until the day of experimental or inductive science, that any very marked progress was made in any of the descriptive sciences. While this method is limited to the descriptive sciences, the results derived from these sciences are to be used in the normative sciences as well, we shall see later.

5 THE METHOD OF INTROSPECTION. The method of introspection is the special method of the science of psychology. All above-named methods are general and are used in all the descriptive sciences, psychology included, but introspection is specifically the method of psychology. While it is true that psychology owes most of its advance in recent years to the experimental method, it is nevertheless true that the method that characterizes psychology is introspection. By introspection is meant self-analysis or self-observation. Analysis and observation are general methods of science, but self-analysis and self-observation are methods of psychology particularly. There is nothing mysterious about this method though it does take patience and skill to learn to use it successfully in analyzing our experience into its elements. If we would find the mental states that correspond to certain bodily expressions we must look within our consciousness for this correlation. The other scientific methods can take us a long way in psychology, but no other can give us the real laws upon which the mind acts, for after all experiments are performed, we still have to refer this data to consciousness for the final word. Mind is not understood in terms of matter alone, nor is it enough merely to correlate physical and mental processes. Mind can only be studied in terms of mind, and the only method here available is introspection or self observation. There is grave danger that we forget this important fact in this day of experimentalism. But forget it though we may, the logic of necessity will drive us back to it again.

6 **BALANCE OF METHODS.** It must be remembered that these methods are all available and all necessary in science. We cannot get along without any one of them. At one time one is more valuable or useful, at another time another, depending on the nature of the material and the state of development of the particular science. We must therefore govern our method by the data to be handled, and in most cases this will result in the striking of the proper balance between the different methods which are available. Methods are our scientific tools with which we shape our experience, and like the master mechanics, we use one tool at one time and another at another, depending upon the material used and the aim to be reached, for our methods are dependable both on the aim to be accomplished and the nature of the material to be wrought into shape.

7 **SUMMARY OF THE METHODS OF SCIENCE.** Briefly summarizing, then, we will say the methods of science are analysis and synthesis, induction and deduction, experiment and introspection. If we were looking for one word to cover all methods perhaps the best one would be observation, for all methods are expressed in observation, which may be either objective or subjective. The subjective method here referred to is that of introspection and is the particular method of psychology, as it seems most fitting to deal with the materials of consciousness. There is another subjective method called reflection, which is the characteristic method of philosophy, or the normative sciences, but it need not detain us here. Now the method to be employed in any given science will be the one of those above mentioned which is most useful in manipulating the data of that particular science, but generally a balance between the different methods will have to be struck if the greatest gains are to be made.

Now that we have discussed the aims, scope and methods of science, each in a separate chapter, let us turn to a chapter in which we point out the relations of the various sciences to life as a whole.

CHAPTER IV

THE RELATIONS OF SCIENCE TO LIFE

I THE AGE OF SCIENCE. For our purposes enough has already been said as to the relation between the various sciences to one another, but perhaps their place and value can better be seen as a whole if we speak of the relations of science generally to life.

Our age has rightly been characterized as the age of science and industrial progress. But our industrial progress is the direct outcome or result of the growth of science. The scientist not only has made wonderful strides in his own field, particularly through the methods of induction and experiment, but he has used this knowledge in the service of mankind by aiding in the solution of many of the practical problems of life. Out of each one of the theoretical or pure sciences has developed an applied science. Our physics has grown out into the fields of applied mechanics, electricity and engineering, and all sorts of construction work and invention of the practical utilities of life. Chemistry has given us a science of dyeing and manufacturing of foods and drinks, and it is applied in various ways to mining, engineering, and metallurgy. And the end is not yet.

From our biological and physiological studies, once purely theoretical, has come the applied sciences of hygiene and physical education, with the result that the laws of growth and development of the organism are being taken consciously into account in our daily life. From chemistry and physiology has come the science of medicine. The social sciences are promoting on scientific bases constructive work in the way of improving society in accordance with the ideals of man, which ideals are drawn from other fields of life but which largely depend upon the advance in the descriptive sciences for their realization. And even psychology is coming to be extremely practical, and so

is gathering a great amount of human interest about itself. From every quarter of the earth the cry comes to the psychologist: What can you do for society? The psychologist really tries to keep from showing signs of great joy lest he be thought not to be possessed truly of scientific dignity. But he has given the answer to the world question in small part, and so he has attacked with the other scientist the problems of the world. Now it is well known that no amount of industrial or material progress will settle all the problems of the business, social, moral, religious, political, or educational world. For in all these fields we have to deal with mind as well as matter, and up to the present our chief concern has been with matter. The great progress of the next decade is likely to be made along the line of mental science. Already we have fairly respectable sciences under the name of psychotechnics of business, medicine, and education, and we are struggling to get as good a hearing in the fields of law, social life, religion, domestic life and a good many other fields too. We have only just begun to develop a science of applied psychology. The next decade will see great things come about in the line of applied sciences.

2 SCIENCE AND THE LIFE OF REASON. The development of science shows on the side of rationality a great advance in reason beyond that of common sense. The mind of man was at an early stage of his existence a very small force in controlling his life. Man was a victim of circumstances and a prey to all sorts of illusions and misconceptions. His only teacher was the great cosmos about him. The forces of his environment played incessantly upon him without revealing the secrets of their nature or that of man. But after long ages man came to take a hand in the shaping of his own destiny. The cosmos is no longer his only teacher, he becomes a factor in his own development. His adjustment to his environment becomes a conscious process. But not until the development of science does man reach a high degree of ability to shape not only his own destiny, but to modify the circumstances under which he lives, so as to promote the realization of his best self.

Science then marks a stage in the evolution of intelligence and reason beyond that of common sense, or the still more

primitive stage of his cosmic existence, before he consciously regarded himself as a factor in the creation of his own destiny. We are not to say here that science marks the stage of highest development of human reason, for unless the reflective sciences of philosophy are included there is yet a higher stage of rational development. This will be considered later.

3 SCIENCE GIVES INCREASED FACILITIES FOR LIFE, BUT DOES NOT GIVE ITS MEANING. We have greatly emphasized the value of science for practical life. We can scarcely overestimate its value, provided we do not lose sight of the broader point of view of the meaning and value of life. There is great danger, however, that we become intoxicated, or at least light-headed, under the influence of modern science. The progress in science is so rapid and the pace of the scientist is ever being accelerated. Movement is what grown people like as well as babies, but the sober old cranks of society scratch their heads and say, What does all this fuss mean anyway? Is the world going mad?

This is a very real and vital question, and much is at stake in giving our answer. So we cannot afford to answer it with a shrug of the shoulder, or a look of disgust. The question is real for it is concerning the deeper meaning and value of life that we are seeking information in the answer to this question. The world is in danger of going wild over science, more particularly because its results are so noticeable, and can be exposed in the many concrete and practical ways we have already pointed out. Let us, then, proceed carefully in our estimate of the place and value of science. Science does increase facilities for our practical life. It does give us wonderful time and labor-saving devices. Indeed in the purely time and space world it has no equal, here it reigns supreme. It might also be said with equal truth that science increases our human wants as well as facilities for supplying them, but it does not give us any true insight into our real needs. This takes descriptive science out of its provinces. A need implies an "ought" which does not exist as fact, but as purpose or idea.

Science increases the facilities for living but does not create necessarily a better life. The forces at work in the development of a valuable life are purposes,—ideals and are not

economic, however important these latter are for our practical existence. Man demands not only existence, but a purposeful and valuable existence. Man does not live by bread alone.

4 WE MUST TURN TO PHILOSOPHY FOR THE MEANING OF LIFE. We have observed that science fails to give the whole account of life, for it leaves out its meaning and value, and this is much like gathering in the husks and leaving the ears behind. What is life without meaning and value? Indeed what would science itself be if life had no meaning? The life we live must have a meaning of some sort, or it would have no existence as idea. The quest for this meaning is not the business of science, but of philosophy, or what we have called normative sciences. True, some scientists occasionally turn philosophers without knowing it, and attempt to give both a descriptive and a normative account of our experience, to explain it as fact and to give it meaning and value as well, but such hybrids are fortunately not many, and it is well they are not, for they would soon succeed in giving us a riddle of the universe, such as would take many generations of thinking to clear up to the mind of the average man.

5 GENERAL SUMMARY OF THE AIMS, SCOPE, METHODS, AND RELATIONS OF SCIENCE. In summarizing and concluding Part I of this volume on the aims, scope, methods, and relations of science, we shall mention only the most salient points so far brought out. We have found that it is the specific aim of science to give a descriptive and explanatory account of the world, and the stages of development or progress toward this end are observation, correlation, and classification of facts of experience and then follows description and finally explanation, which amounts to the relation of the particular facts to the laws to which they are subordinate. The fact looks to the law for a fuller explanation of itself. After the stage of law and principle is reached, the practical interest of man shows itself by applying these laws to the problems of life.

The scope or field of science was found to be as broad as human experience, but not so deep. It includes all the data of life, but it does not show their underlying meaning for life as a whole.

The methods of science are analysis and synthesis, induction and deduction, experiment and introspection. These have equal value in their own place, but are not interchangeable. All have been found serviceable in gaining a larger and deeper insight into the field of experience.

The various fields of sciences are related as are the parts of any organic whole, and it is only in the interest of greater effectiveness and because of more special interests, that the field of science has been divided at all. The practical relations of science to life are many and important. But there is a limit to what science can do. It must be confined to the perceptual or phenomenal world of time and space, to the world of description and explanation, and the deeper meaning and value of life must be left to other inquirers. Otherwise two essential points of view are taken at once and the result is confusion.

It is now time to turn to the field of the normative sciences, or generally speaking to philosophy, in order to trace out the deeper significance or meaning of life to which reference has several times been made. And here as in Part I we consider the subject under the head of aims, scope, methods and relations giving a chapter to each one. After this detailed treatment we can proceed to a final statement of the relations of science and philosophy in Part III, and so divide the field of human experience between them. We shall, then, be ready for a specific account of the relations of philosophy and of education, in Part IV, after which we may successfully treat the ethical aspects of education in Part V.

PART II

THE AIMS, SCOPE, METHODS AND RELATIONS OF PHILOSOPHY

CHAPTER I

THE AIMS OF PHILOSOPHY

I THE WORLD OF DESCRIPTION AND THE WORLD OF APPRECIATION. We are now to trace the aims, scope, methods, and relations of philosophy, just as we did in the case of science in Part I. In this chapter we are concerned with the aims of philosophy. What is the aim of philosophy? What does the philosopher try to accomplish? Why does he regard science as unable to give a complete account of the world? These are questions whose answers will come out more clearly as we proceed in this chapter.

We have already seen that the world the scientist lives in is the world of description. He is concerned with the causal world of sequence and phenomena, with the world of time and space, the world of fact or the *is*. We shall find that the philosopher is concerned with a different world. To be sure he is concerned with things temporal, as well as the scientist and the man of common sense, but as a student he is concerned with the world of eternal values. If we go no farther than the world of science we see nothing as valuable, all is meaningless. Vanity, vanity, nothing but vanity, was not spoken of the world of values, but of the fluctuating, vascillating world of the senses. Heraclitus could see nothing but a ceaseless change or flux, nothing was stable. The only reason was because he could not see far enough. There is such a thing as philosophical myopia, and he had a bad case of it. He could not see the forest for the trees. The facts blinded him to the deeper underlying meaning and reality of things. There was even a certain consistency or changelessness about the changing, that should have given a small ray of hope at least, for the thing that never ceases to change is changeless and permanent in one sense at least.

Well, as long as we stay in the world of science, we are in

the world of time and space or sense-perception. And in last analysis things are not what they seem. In reality seeing is not believing. The man with a longing for truth does not rest satisfied with the story that perception tells of the world. There is a more profound order of things, not so easily observed. The world of sense-perception, the world of description, is the starting point in the quest for reality, but it is not the end of the search. The data of science are the facts of human experience, and certainly a philosophical account of life must begin with these data. But unlike science, philosophy is not done with its task when it has succeeded in arranging classifying, and describing these facts. Philosophy begins here just where science leaves off. It leaves out of account nothing that science has gained, for this is the very beginning of its course. It has been said that the relation of religion and morality can be likened unto two concentric circles of unequal radii, the smaller circle representing morality and the larger one including it religion. Now I think that science and philosophy can be compared in the same way. Philosophy can make no headway unless it takes account of all that has been gained by science in understanding human experience. Philosophy starting here sets out on a more extended search for the meaning and value of life. This is the one great aim of philosophy, to find out what life means as determined by our experience as a part of this life.

2 PHILOSOPHY, THE VIEW OF THE WHOLE OF LIFE; SCIENCE, OF A PART. In as much as experience cannot be complete, and further since it is the aim of philosophy to give the meaning of life as a whole, it becomes clear at once that philosophy must construct the whole out of the part of human experience.

So the aim of philosophy is seemingly rather ambitious and yet not so much so, if we are to remember that the philosopher has no right to go farther than the facts of experience warrant on the grounds of rational inference. We cannot get away from inference in philosophy any more than we saw we could in science. When the scientist passes from mere correlation and comparison to generalization, he arrived at a conclusion which was not found in the premises, but yet which was warranted by them. So it is in philosophy. The philosopher must

generalize, from judgments and conclusions, but all these must be consistent with the true principles of rational inference, both induction and deduction.

It is the philosopher's aim to give a systematic way of viewing the universe as a whole. James says, that the most important part of a man is his view of the universe. A man's view of the universe is his way of looking at experience as a whole. It is his grip on totality, to use James again. Without this view of life, experience is meaningless, for it is only by reference to this view of the totality of things that the fragmentary bits of our experience have any meaning at all. The parts become significant only in reference to the whole. What does the balance wheel or the mainspring of a watch mean, if we have never seen, or heard of a watch? What does each fragmentary bit of our human experience mean unless we can relate it to a whole, which is not given in any single experience or all our experiences together?

Now this idea of constructing a view of the whole is neither impracticable nor unthinkable. We are doing this same thing in a smaller way every day of our life. We find bones of extinct animals scattered all over the world. From these fragmentary bits the whole is gradually conceived and the missing parts are filled in with plaster of paris, or some other material, and these are displayed in our museums as the amazing handicraft of our scientists. And the wonder of it all is that no man now living to tell the story has ever seen this specimen of animal life! Or again, take the case of the construction engineer, who sees every part in its relation to the whole which does not exist as fact at all, but as idea, but which idea of the whole is nevertheless the very thing that gives to each concrete part the only meaning and value it has. Nor is the case of the inventor any different. The idea of the whole is the standard of values for each part. If the parts mean anything and have any value it is only because they have relation as parts of this organic whole, or unity.

3 THE AIM OF PHILOSOPHY. With these several examples before us, how can we be so bold as to assert that the philosopher is only chasing butterflies? Is it any more unreasonable to suppose that the philosopher with his broader aim can

determine the meaning and value of life as a whole, than it is that the scientist can construct an animal which he has never seen or heard of with nothing but a few old dry bones; or that a builder can design and construct a building the like of which no one has seen; or that an inventor can construct a machine about which no one else has ever dreamed? There is no reason unless it is in the nature of mind to be so limited. But the fact that it is not so limited is evidenced by its never ending search for the yet unknown. The facts of mind get their meaning only by reference to the whole, or totality of the universe. And without some notion of the whole of things the fragments of our experience are as dry bones, for with themselves they have no meaning. The meaning and value of life then rest in the relation of the whole to the parts and the parts to the whole. Where there is no unity there is no meaning or value. Where there is unity and organization, the facts get their meaning by the place they occupy in the system of things.

Do we any longer have difficulty in seeing that science is pressed too heavily when we expect it to give us a complete account of our experience? Science can do nothing more than organize and arrange the facts of experience into regular order or sequence. And this system of things in the phenomenal world is the whole to which the parts are referred for their explanation as phenomena. But the systems of the sciences need to be ordered and arranged, and they need to be explained also. But all this does not imply more than a science of sciences, and philosophy is more than that. A science of sciences would still demand a philosophy in order to give the world of description meaning and value. A science of sciences would still be less than the whole of human experience, for science must rest content with a complete description and explanation of the facts of experience, so far as experience has gone. But experience is a constantly widening circle; it is ceaselessly changing and presenting new aspects. Science then gives us not the whole but only a part of experience, and a small part at that. But the word part implies a whole, and the part is not the whole, but essential to the organism of the whole, and depends upon this latter for its significance. The part, then, must be related to the whole of which it is a part for its meaning and value, and the whole which is not given in the part is

nevertheless so related to it as to include it as a part of its own organization. A part is so related to the whole that the organization is incomplete without it, and the whole is so related to the part that the latter has no significance or meaning except in relation to the organization as a whole.

Then the world of science is not only phenomena and a mere part of the larger totality of things, but it is meaningless and valueless except in reference to this larger whole. Now the whole is never given in a part and so not all at one time as fact or phenomena. The whole is thus not preceived in our experience in the world of time and space. The part, however, is so revealed. And it is from the part that the philosopher, like his brother scientist, constructs the whole, or his view of the totality of things. It is plain, then, that the philosopher is not a mere dreamer, but is engaged in the serious business of determining the meaning and value of human experience by showing its significance for the whole which the part implies.

We have stated the aim of philosophy as that of rendering experience significant, or that of showing the meaning and value of life. We are now able to see that such meaning and value are impossible except as the experience, which is the part, is related to the larger whole which it implies. All facts then get their significance by reference to the whole. In as much as the part and the whole are organically related, they are functionally interdependent, that is the dependence works both ways. The whole must be implied by the part, that is we must start with the phenomenal world of science and sense-perception, and the whole in turn gives significance and meaning to the fact of part by showing its place in, or its relation to the whole. There is, then, nothing mysterious about the aim of philosophy, when we say it is to show the meaning and value of life. And this we have seen to be the task of showing the significance of our fragmentary experience for life as a whole.

4 PHILOSOPHY AS APPRECIATION. But when we come to this plane of understanding and see life from the philosophical point of view, human experience gains new significance, because of the new and higher light shed upon it by the relation of whole and part. We have thus been led through the world of description of facts to a realm of values, purposes and ideals,

no longer to be systematized for the mere purpose of causal explanation, but to be appreciated. Indeed we have now left the world of mechanical causality entirely, and are in the world of appreciation and values, or the teleological world of aims and purposes. The transition is not so abrupt as would seem at first thought. We have not felt the world of mechanical causation in one sense, for we are still limited by it in our experience of fact, but by means of it as our starting point we have transcended its limitations in thought. We can now see the forest despite the trees, the particulars do not blind us to the universal, the very foundation of their meaning and value.

When we pass from the world of mechanical causation to the teleological world of values and meaning, we have made the transition from the world of description and phenomena to the world of appreciation. We are no longer to limit our search to the causal relation of facts in the world that now is realized in our limited experience, but by means of this world we reach out to its other, the great world of the whole or totality of things. Experience in a limited world of time and space gives way to a great world of meanings and purpose. Through understanding we have come to appreciate, for now the facts are not isolated but related into a system of things and so have value. Facts thus become values in their relation to the whole, and the world of experience ceases to be purely temporal as implied in science, but partakes of the external, in just the same way that the part is related to the whole. Man need not complain of his finitude. He might better complain of himself that he has not realized the external aspect of his nature.

Temporal The world of description and the world of appreciation are the two aspects of the same world, the world of reality. This world is temporal as viewed from the angle of a fragmentary experience, but is eternal when seen from the angle of the whole. The whole of our experience cannot be realized in any one unit of time, for to make such a claim would be to identify the whole with the part. The reality of the world is thus not fully revealed in the facts of experience, but rather as idea or purpose, which manifests itself in time as the world of fact of the world of experience. This world of fact, the descriptive world, is the aspect of reality that is presented to a temporal and spatial view of experience, it is the external meaning of the

idea of the whole, or the way reality is expressed in point of time. But the deeper aspect of reality is not thus revealed in time, for the whole cannot be expressed in a part, or in time. The idea of the whole is the internal meaning of the idea. Every idea thus has its external and internal significance, its relation to the world of fact and the world of meaning, the world of science or phenomena and the world of philosophy the realm of values and meanings.

Now in this world of purposes and values the philosopher has a task resembling that of the scientist. These values and purposes must be related and harmonized just as the scientist must systematize his facts. It is only by such a harmony of these internal meanings or values that anything like a complete philosophy of life is possible. Here again the only meaning possible is that derived through harmony and organization of purposes or values in a larger system of purposes. Such a system of values will always be incomplete on account of the fallibility of human thought, but this sort of reflection is necessary if experience is to have any significance, if life is to be regarded as worth the living.

It is not our purpose in this chapter to work out a complete philosophy of life, but as its heading suggests to make clear what the aim of the philosopher is.

5 SUMMARY OF THE AIMS OF PHILOSOPHY. We have now answered in brief the questions asked at the beginning of this chapter. We see that it is the aim of philosophy to make experience significant, or possess meaning. And this is accomplished through the relation of the part of experience to the whole which clearer reflection demands. The philosopher has no quarrel with the scientist. On the contrary, he is grateful to him for having made such a good beginning. But the philosopher takes up experience where the scientist leaves off,—with causal description and explanation, and sets out to find its other, the whole which the part implies. He knows the whole must be, or exist, for the part implies it, just as the bone of the extinct animal suggests the whole which is constructed from the part.

The philosopher leaves to the scientist to work out the relation of the parts to each other on the temporal side of our

experience, in the world of causality and sequence, but the philosopher begins here and moves on in quest of the whole, or totality of things. The world of reality presents one side of itself to a limited view of time and space, the world of description; it presents quite another to the view from the side of the whole. The question as to which of the two aspects is more real can be answered by asking, which is more real the whole or the part? Both are real, for the whole would not exist without the parts, and the parts would have no significance without reference to the whole. The world of the scientist, or time and space, is real then, but only as the part is real for the whole.

Science will never be able to give the whole account of life, but as we saw in Part I it gives a very significant part, but yet only a part, and this demands always its other, the whole. We may contend for a world of isolated facts, or independent reals, but our very idea of isolation involves the conception of the unity of the whole. To get away from the whole is impossible. The very limits of time and space, as our experiential world, imply something not given and that cannot be given in one experience. We must transcend time and space if we are to get meaning and unity out of our experience, but when this is done by gaining a clear conception of the whole, which by its very nature cannot be given as a part, we have already transcended the world of time and space, or the phenomenal world of science and common sense, and have entered into the world of spiritual values.

The scientist and the philosopher may live in the same world, and they do whether they know it or not; they may even live in the same house and sleep in the same bed, or indeed be in the same man, but it is only when they know what they are about that they can give to the world the two points of view demanded by a consistent reality, a world of true being and eternal. I hope the world of the scientist and the philosopher are becoming more clearly distinguishable in thought as we proceed, for much depends on this distinction if the reader is to follow me through to the end of our journey.

Now that we have stated rather fully the aim of philosophy, we will do well to turn to a more detailed examination of the scope or field of philosophy. To this matter we give the following chapter.

CHAPTER II

THE SCOPE OR FIELD OF PHILOSOPHY

I PSYCHOLOGY AND PHILOSOPHY COMPARED AND CONTRASTED. We should have by this time a fair understanding of the aim, scope, and methods of science, and its relation to our practical life. From the foregoing chapter particularly, we should see how the aims of science and philosophy differ. In this present chapter we hope to get clearly in mind the scope or field of philosophy, so that its field or range can be more clearly distinguished from that of science.

The range of philosophy is limited to human experience and what it means; the range or field of science to human experience and how it is related in time and space, or to its causal sequence. Science has only to do with order and sequence; for philosophy sequence has no meaning, except for the part of the world viewed by science. Sequence is not of the whole but of the part. Science deals with facts, both mental and physical, and the whole range of such facts. So does philosophy, but in a very different way, and for a very different purpose. The difference in purpose or aim has already been brought out. In this chapter we are to emphasize the scope or field of philosophy, in the next we shall emphasize the method. All along we shall make comparisons and contrasts that will aid in seeing the respective fields of science and philosophy.

Perhaps there is no field where science and philosophy seem to the average man to overlap as much as in psychology. There is no reason for this confusion of thought, though it does exist. Psychology is a descriptive science, and is like all the other descriptive sciences in that it aims to give a full account of the ways its facts or data are connected. The same stages of development are passed through as in any other descriptive science, namely observation, comparison, classification, and generalization. The same methods are employed as in the other sciences,

with the addition of one particularly suited to its own special purposes, that is,—introspection. The chief difference between psychology and the other sciences is in the materials with which it deals. For psychology the only facts dealt with are mental, states of consciousness. But these facts are to be analyzed, classified, described and explained in their own way, just as are the material facts of our experience. No greater reality should be ascribed to the facts of psychology than to those of the physical, biological, or sociological sciences. Indeed all facts are of equal value in the world of description. It is in the very nature of science that all values be eliminated so that a wholly impartial view of the world be given. Not so in philosophy, where values are ascribed to facts as parts of a whole of reality.

For the botanist a weed is just as good, or valuable as a rose. The distinctions in the scientific world are not made on the basis of values at all. The system to which the facts of science relate is not the system of values to which in the philosophical world we ascribe reality. No more does the true psychologist ascribe values to his facts, the states of consciousness, than does the botanist to his facts. It would be meaningless for psychology to ask which is the more valuable, a memory or state of feeling, a judgment or an emotion, an act of cognition or an act of will. You might just as well ask of the physicist to tell which is the more valuable, black or white? In a world of description, where values cut no figure, such questions fall to the ground.

The psychologist is not to be feared by the philosopher any more than the physicist, the chemist or the botanist. For while all are to work on the basis of experience, the fact basis, they have a different purpose in dealing with these facts and there is no cause for conflict. Like the other scientists the psychologist aims only to describe and explain his facts, and unlike them all the philosopher attempts is to show the meaning and value of these facts for life as a whole.

2 DATA OF PHILOSOPHY THE WHOLE OF HUMAN EXPERIENCE. Since the data of philosophy is the whole of human experience, it must take into account both mental and physical facts, as its data. And yet this is only another way of saying what has already been said, that philosophy and science deal

with the same data, the facts of experience, but each in its own way and for its own special purpose.

Neither in science nor in philosophy do we go outside experience for our data, but find our beginning in the actual world of time and space. In science we not only have our beginning here, but never get beyond this causal aspect of experience, but in philosophy this serves only as our starting point. By use of the special method of the philosopher, reflection, to be discussed in the next chapter, he passes beyond the world of mere phenomena into the world of values and purposes. The philosopher is in no sense a creator of values, on the contrary his world is one of absolute and eternal values, that are to be shared by all who know, feel, and will correctly. It is here that the part finds its other, the whole, the unity of all the parts.

3 PHILOSOPHY ALWAYS VIEWS EXPERIENCE FROM NORMATIVE ASPECT. The data of life as facts of experience should lead us on to the joys of this other world. Science may go on forever and it will never satisfy the craving of man's soul for the deeper values of life. No world of mere analyses, comparison and generalization can fully satisfy the demand for a life with meaning and purpose. The part can never rest without its other, the whole of which it is part. And value and purpose cannot come from a mere causal inquiry. There are no values where there is no higher unity of purpose, and no appreciation except of values.

Philosophy never loses sight of its one aim, that of giving an account of the world as appreciation and value. The view of philosophy is always normative, never descriptive. The view of science is always descriptive and never normative. Every single fragment of experience can be observed from two points of view, descriptive and normative, causal and non-causal, fact and purpose, sequential and anti-sequential, ideal. And it is the business of philosophy to view the facts of experience from the normative, non-causal, purposive or anti-sequential point of view, or in short, the teleological view.

Let us take as examples of the above distinction a few facts to be observed briefly from these two points of view. I let loose a stone and it falls. I ask why, and then explain the phenomena by referring it to the law of gravitation, which is

only another fact of wider generalization. This is the procedure of physical science. Now I ask what is the nature of gravitation, and how it is related to the universe as a whole, and at once I go from physics to metaphysics, or more generally speaking, to philosophy. Or again, I turn my eyes toward an object and get a certain mental impression which is called a perception. I explain this phenomenon by stating that a certain hypothetical medium called ether was set in motion, and these undulations or ethereal vibrations set in motion a certain chemical activity in the retinal area of the eye, and this gave rise to the state of consciousness called perception. This is pure description and explanation. But now let us ask, What is the ultimate nature of this ether? What is its relation to reality? How do the vibrations in the ether produce this state in the nerves called a stimulus? And what is still more perplexing, how do these nervous excitements give rise to a state of consciousness? All these questions go deeper than mere description and explanation, they involve questions as to reality, and hence are metaphysical and epistemological.

4 PHILOSOPHY INCLUDES SEVERAL SPECIAL VIEWPOINTS. We have up to the present been using philosophy as a blanket term, much as we did science until a division of the field of science was made in Part I corresponding to this one. We must now become more specific, for the word philosophy is a very broad term. The world of values and meaning belongs to philosophy, but it is convenient to divide philosophy into several branches, corresponding to the several sets of values, to be found in its province.

In this section we shall mention only the various branches of philosophy and leave for later sections of this chapter such detailed statements as the aim of this volume seems to justify. These branches are metaphysics, epistemology, logic, ethics, aesthetics, and the philosophy of religion.

It is quite consistent with the general movement of experience toward sharper and more differentiated points of view, that the philosophy of life has come thus to differentiate itself. All is to be gained and nothing lost by this division of labor, or differentiation of function, provided we keep clearly in mind the one ultimate aim of all philosophy as that of revealing the

meaning and value of life, or experience. Each one of the branches mentioned above has a certain field of human experience with which it deals and it has its own aims, scope and methods, and its own field of values.

A division of the field of philosophy here will not only serve to make more clear the whole scope of philosophy, which is the aim of this chapter, but it will aid greatly in the future when we come to trace the relations of ethics, which is one of the branches of philosophy, to education. Philosophy as the view of the whole of life is necessarily so broad that a division of the field is necessary if substantial progress is to be made. These several branches of philosophy are variously called, when taken together, the philosophical disciplines, the philosophical sciences or the normative sciences. The first phrase sounds too scholastic while the second one is too apt to confuse the distinction already made between philosophy and science. The third will be used in this volume when reference is made severally to the branches of philosophy. The particular reason for my choice of the phrase, *normative science*, as applied to the branches of philosophy, is that it signifies by the very word *normative* that standards and values are involved, and this certainly separates these branches from the descriptive sciences, where values and standards are in the sense here used unknown.

5 METAPHYSICS AS THE SCIENCE OF REALITY. Metaphysics is the branch of philosophy that is concerned with being or reality. It might be defined as the science of being or reality. This is an old question for philosophy and has interested the world at least since Thales, and probably much longer. Metaphysics is the search for an ultimate or first principle of the universe, in terms of which all things may be explained. This principle has been variously asserted to be earth, air, fire and water, by many different philosophers in the early stages of philosophy. In course of time this ultimate principle came to be endowed with what seemed to be consciousness. For Anaxagoras this first principle was the Apiron, or living, breathing matter. This marked the transition from a crude materialism in metaphysics to a hylozoism. This hylozoistic element had the advantage of taking account both of the

world of matter and of mind, which were then not always clearly defined, but it had the difficulty of failing to reconcile the apparent dualism between the world of mind and the world of matter.

Again the attempt has been made to find a common element between mind and matter and in terms of this pan-psychistic principle to define the reality of both mind and matter. And still other philosophers have given up the idea of a materialistic, hylozoistic and the pan-psychistic principle, and have regarded the reality of the universe as definable only in terms of ideas or purposes. These are the idealists. The crude and unreflective realists assert that the facts of mind and matter are equally and independently real, while the newer realists hold that there is no dependence between the knower and the known, or between consciousness and matter, as the idealist claims, but that consciousness and its object become one and the dualism is reconciled in the cognitive or knowing process.

But whatever the claims of metaphysics as to what constitutes reality or being, the field and aim are practically the same for them all, and that is to discover the nature of reality or being. What is and what is not, what exists in time and space, and what is independent of these, and in what sense are the facts of the phenomenal world real at all? These are questions for metaphysics and they penetrate the innermost nature of the universe.

6 EPISTEMOLOGY AS THE SCIENCE OF KNOWLEDGE. Epistemology is concerned with knowledge. What is the nature and extent of knowledge? How can we know the real if it exists? What is the validity of knowledge in the search for truth and reality? These are some of the questions of epistemology, and they have received many different answers through the ages. Protagoras, chief of the Sophists during Plato's time, asserted that knowledge is impossible. All is opinion, sense-perception. "Man is the measure of all things," he said. There are no universal standards of knowledge. Every man is his own individual standard. This proposition also asserts that there are no metaphysical standards of being or reality. This is the extreme of scepticism. But the great majority of philosophers think knowledge is possible, but just

how it is to be derived is a matter on which there is much disagreement. Some contend that the principles of knowledge are all gained in experience, *a posteriori*. The former group are called empiricists, and the latter rationalists. While they differ as to the limits and possibilities and methods of getting knowledge, yet their main aim is the same, what can be known, and how can it be known?

7 LOGIC AS THE SCIENCE OF CORRECT THINKING. Logic is probably the most abstract of all the sciences. It deals with relations. It stands in about the same relation to the sciences generally as does mathematics to the descriptive sciences. It is not to be understood that logic has nothing to do with the descriptive sciences, for it does. The great question for logic is what constitutes proof. The concern of logic is with propositions, which assert a certain relationship as existing between things or ideas. Logic must decide the truth of these propositions by reference to its own norms or standards of value for truth. It is the nature of truth and reality to be consistent, and the logical test amounts to a proof that such consistency exists. If a proposition is such as to assert a thing by denying it, then the thing whose existence is denied exists as a reality. For instance, Protagoras asserted the proposition that knowledge is impossible and that man is the measure of all things. In both these propositions we find a contradiction, for knowledge is asserted by denying it, since this much knowledge at least is certain. The second proposition is false, for by asserting that man is the measure of all things, we assert that this standard at least is universal, and hence all is not particularity.

In logic we are concerned with the standards or ultimate tests of proof, or what constitutes proof, or sufficient grounds of knowledge. These standards are not given as data in the world of descriptive science. They are not presented as immediate data for consciousness, but come through reflection on the relative values of experience as determined by the meaning of the whole. Logic is, then, concerned with the values of truth, and like the other normative sciences, its business is to aid in giving richer meaning and content to life, by showing the form our propositions or assertions of relation must assume.

8 ETHICS AS THE SCIENCE OF RIGHT CONDUCT. Ethics is the science of right conduct. What is the nature of goodness? What is evil? What is the nature of freedom? These are important questions for ethics. Just as metaphysics determines the nature and standards of being or reality, and epistemology the nature and extent of knowledge, and logic what constitutes proof, so ethics determines the nature of right conduct and action. Ethics must not be confused with morals, for ethics is a science, and morality is an art. One has to do with knowing the standards of right action, and the other with right action itself. Ethics determines the principles of our actions just as geometry determines the principles of our carpentry. Ethics, then, is related to morality in the same way that geometry is related to carpentry, as physiology is related to hygiene, or as mathematics is related to civil engineering.

Just as metaphysics has always been in search for the one ultimate and final principle of the universe, in terms of which all things could be explained as constituents of reality, so ethics has always been on the hunt for the highest good. There are many goods, but there can be only one highest good. This good is of course the chief aim of life whatever it is. One set of philosophers has given one name to it, and another has given another. The Epicureans asserted the highest good to be pleasure. The Stoics said it was duty. For Plato the idea of the Good or the Beautiful was the *summum bonum*. The Utilitarians held that it was the greatest happiness to the greatest number. Others have held social efficiency, self-renunciation, perfection, and self-realization to be the highest aim of man, or the chief good.

Ethics is thus a normative science, for it sets up standards of conduct, and does not merely describe conduct or action, which is the business of the descriptive sciences. In this matter ethics is like all the other normative sciences. But we need not discuss ethics further here, since our only aim in the chapter is to give a clearer view of the scope or breadth of philosophy or the normative sciences, and this in order that later we may see more clearly the distinctions between science and philosophy as a whole, and further how philosophy generally, and ethics more particularly, are related to education.

9 **ÆSTHETICS AS THE SCIENCE OF THE BEAUTIFUL.** *Æsthetics* is the science of the beautiful, and is related to art in the same way that ethics is to conduct. What is beauty? What are the standards and values of the beautiful? These are questions for *æsthetics*. And here again the questions have received many different answers in the history of *æsthetics*, by as many different philosophers. Some identify the beautiful with pleasure. One *æsthetician* says, "A beauty not realized is a pleasure not felt, and a contradiction" (Santayana). But whatever the answers to these questions, and they concern us very slightly here, the standards and values with which *æsthetics* is concerned are those of the beautiful. A purely descriptive account of the beautiful and the way it affects us, would be a psychology of beauty. But *æsthetics* is concerned with the deeper questions of what constitutes beauty, and what are its standards and values.

10 **PHILOSOPHY OF RELIGION.** Philosophy of religion is the last of the normative sciences we have listed. Here the questions relate to conduct again, but this time with man's conduct in relation to God. What are the principles of man's religious actions, or of his relations to God, so far as conduct is concerned? What are the principles of right religious action or conduct?

Again, the history of philosophy and religion shows many answers. Here also we find the distinction made between philosophy and religious knowledge and belief, also what constitutes sufficient grounds of belief, and the nature of belief. What are the religious values? From these questions that philosophy of religion asks, we get a still broader conception of the scope or the range of philosophy, or the normative sciences.

11 **OUR CHIEF CONCERN IS WITH ETHICS.** The several fields of philosophy have been mentioned and their respective questions asked merely to get a better idea of the whole range of philosophy. We have but one concern in this chapter, and that is to determine the scope or range of field of philosophy.

12 **SUMMARY OF THE SCOPE OF PHILOSOPHY.** It is now

time to bring this chapter to an end. Let us take an inventory to see what we have really gained. We have discovered that philosophy is a very general term, just like science, and covers several subordinate fields of inquiry. This division of the broad field seems justified in the interest of more profound inquiries. The questions philosophy asks do not sound much like those of science, and its answers are much different, and more far-reaching. In metaphysics philosophy asks, what is being, or reality; in epistemology, what is the nature and extent of knowledge; in logic, what constitutes sufficient evidence of truth; in ethics, what are the standards of right conduct; in æsthetics, what are the standards of beauty; and in the philosophy of religion, what are the principles of right religious action and belief? From these questions asked and answered by the several fields of philosophy, a fair conception of its scope as a whole should have been gained. In this way we arrive at a clearer conception of the distinction between science and philosophy as a whole.

CHAPTER III

THE METHODS OF PHILOSOPHY

I GENERAL METHODS OF PHILOSOPHY NOT UNLIKE THOSE OF SCIENCE. That there are some very close resemblances between science and philosophy is indicated from the fact that the branches of the latter are called normative sciences. Philosophy must be in some sense scientific or this appellation is a misnomer. It has been noted already that science and philosophy are alike in that they both use the same data, the facts of experience. We have noticed too that their aims are different, the aim of science being to give a description of these facts in their causal relation, while philosophy takes the same facts of experience and aims to discover their meaning and value. Now it stands to reason that although the facts of the two fields of inquiry are the same, that their methods must be in some respects at least different, since their aims are so different.

Any systematic and orderly arrangement of facts, leading to comparison and generalization, deserves to be called a science. In this sense philosophy is scientific, and in so far as it is, it uses the general methods of science, analysis and synthesis, induction and deduction, observation, comparison and generalization. Philosophy also makes use of the method of introspection, which is particularly adaptable to the manipulation of the data of consciousness. Nor does philosophy fail to use the results of experiment, though this method serves no direct purpose for the philosopher. In the hands of the descriptive scientist these methods lead to generalization and explanation, which is the end. So far so good, but the philosopher, governed by his own deeper purpose, must go farther, and since this is the limit of usefulness of these methods, the philosopher must look for a method better suited to go with him to the end of his journey. All these methods lead only from fact to gen-

eralization, or fact to a larger fact. They do not give to the facts any significance, or value in themselves. True, these methods of descriptive science lead to very important generalizations, without which the philosopher would have nothing to do, since he begins where the scientist leaves off, he takes up the generalizations or conclusions, and shows their meaning in a system of the whole. If they have no meaning for the whole, they are rejected as unsound and unwarrantable generalizations, since they form no part of the organic, or functional whole of reality.

Then perhaps we should modify somewhat our former assertion, that the scientist and the philosopher deal with the same facts of experience. They do, but the scientist leads from fact to generalization and law, and the philosopher takes up the work at this point and deals directly with these laws and principles, and hence only indirectly with the particular facts themselves. It is in this way that advances in science should aid in a better philosophical grasp of the meaning of life as a whole. Unless there were such a division of labor as this between science and philosophy there would be needless waste of energy. Unfortunately this distinction between the two fields is not always observed. The result of mixing the two points of view is inevitably a "riddle of the universe," and unclear thinking.

As has been seen, the scope of philosophy is wider than that of any one or all of the sciences. It is more than a "science of sciences," as Spencer called it. For a science of sciences would still be a science, and would remain descriptive and explanatory, no matter how wide flowed the circles of its generalizations. But as we have noted, the aim of philosophy is appreciation rather than description, to find the meaning and value of life, rather than to explain the phenomena in time and space. A method leading no further than generalization of facts and laws will not go all the way with the philosopher, but will fail him before he has penetrated the deeper secrets of life. A special method must aid the philosopher. This method is that of reflection.

2 PHILOSOPHY REQUIRES REFLECTION. The most general methods of science are observation, comparison, and gen-

eralization; of psychology particularly it is self-observation, or introspection; of philosophy it is reflection. Of these methods, all but the last one are limited to pure description and explanation, while the last one, reflection, leads to a new world, that of values. Observation, comparison, and generalization lead to an understanding of the world; reflection to an appreciation of the world. The two points of view are different, but they are only two ways of looking at the same world of reality—the one view that of external relations, the other that of internal relations.

If the meaning of the world as a whole were identical with each fact no search for inner connections and meanings would be worth while, since there would be no distinction between the inner and the external meaning of our experience. The inner meaning refers only to the meaning the part has for the whole of experience or reality. But, as we have seen, this inner meaning is not brought out in a mere causal or temporal series of facts, and hence the methods of rendering a causal explanation of things is not sufficient. There is just one way to get at this inner meaning of experience and this is by the method of reflection. It is the special aim or purpose of philosophy, then, that makes necessary a different method from that of descriptive science. Everywhere in life the purpose determines the method to be used in realizing this purpose. This will come out more clearly in Parts IV and V. Here it is enough to give one illustration further to indicate how the aim or purpose governs the means or methods to be employed in any given cases. Gladstone said, "One example is worth a thousand arguments."

If my aim is to ride in the air I take a flying machine; if I prefer the ground I may go on foot, in a cart, an automobile, or various other ways. If I want to go to Europe I am obliged to choose means to serve this aim. I cannot go all the way by train. And so if I want to journey all the way to the world of reality I cannot go the full distance in the vehicle of science, for its aims are not with reference to such a world, and consequently its means or methods are not expedient for the complete journey. With science I get off at the half-way house of description; the rest of the journey to the land of reality I make with philosophy, and our method

of travel is through reflection. Let us observe how it works.

3 **VALUE OF REFLECTION.** Through reflection the deeper meaning of life and experience is brought out. But how is this done? There is no mystery about it. Clear thinking is the one essential. But so is clear thinking needed in science, and just as clear as in philosophy. The only way experience can be made to have significance is to discover its relation to the whole. We have already noticed in the aim of philosophy that experience has no value unless it can be related to the whole. The part when alone has no meaning, all meaning is in the relation of part to whole. And the whole is not given in experience, but only in reality. The methods of descriptive science cannot discover this relation between the part and whole of experience, fact and reality, for by their nature they are limited to data in their time and space relationship.

By reflection is meant nothing more than the careful study of the parts of experience so well ordered and arranged by the descriptive science, to see what sort of a whole or unity is implied, and then a reflective analysis and criticism in the light of this whole. By the whole of life is meant its reality, its full meaning, and in the light of this whole all parts are studied and criticized and evaluated. Reality is thus not apart from, or independent of life and experience; it is rather the completion of experience. A complete view of life would not reveal experience in its present limitations, but as a whole or unity. It is this whole that philosophy attempts to construct out of the parts that are given in a world of external meanings, or time and space relations. And this whole it is, in all its organic unity of parts, that becomes the standard for life. The whole, since it is dependent upon the parts, just as any other organism is, has no reality except as it is the unity of all the parts. Whole and part are thus functionally interdependent. The difference is that the whole is dependent upon the relation of all the parts, whereas each part is directly dependent upon the functional whole for its significance and meaning.

Reflection brings the meaning of our experiences out into relief by showing their significance as fragments for the universal experience, reality. Now man never is able to construct

a final reality of his own, for two reasons. First, because his powers of reflection are limited to his experience, and second, because this experience can never be complete and final. We are, then, only approximating the whole, or final reality. Organic unity of the present experience within a whole which is thereby implied is quite possible, but as the circle of experience widens so must our view of reality also widen. But this is far from saying there is no final reality. Of course there *is* no final reality in time and space, but time and space are not conditions of the real world at all, but only of the limited world of partial and incomplete experience. Such conclusions are arrived at only through reflection. No amount of generalization based on the relation of facts alone will give the view of the whole, the meaning and value of life. It is only through the relation of the facts of experience to the whole which they imply, that any significance or meaning is attached to the facts themselves. This relation of significance between fact and reality can be revealed only by reflection.

4 SUMMARY OF THE METHODS OF PHILOSOPHY. Shall we briefly summarize the conclusions of this chapter? The methods of science are available for philosophy in so far as the latter inquiry is concerned merely with the external relationships of facts in the phenomenal world, but this limitation of the methods of science renders them useless for the deeper inquiry as to the relation of fact and reality, or part and whole. For this latter search the method of reflection is employed, and for the reason that it is not limited to discovering the relation of fact to fact, or fact to law, but goes beyond to the relation of fact and reality, and this it does by discovering the relation of part and whole.

We have now traced the aims, scope, and methods of philosophy. Further light will be thrown on its relation to science, if we trace its relations to life as we did in the case of science. To this phase of the study we now turn.

CHAPTER IV

THE RELATIONS OF PHILOSOPHY TO LIFE

I THE AGE IN WHICH PHILOSOPHY ARISES. From the foregoing chapters in Part II it will be observed readily that philosophy is not a purely theoretical inquiry. Like science it is purely theoretical up to a certain point, and then the practical motive may express itself, or even predominate. We have called philosophy a search for the meaning and value of life. Another way to put it is to say that philosophy is the summing up of the experience of any one given age. A philosophy of life and experience is limited by the extent and range of that experience. The philosophy of any one nation is not the philosophy of life as a whole. Philosophy projects itself very far beyond experience, but this projection is largely governed by the extent of experience behind it. Philosophy follows life as well as precedes it. It must first follow before it can lead. And while even with a limited experience we can through reflection discover the nature of reality, there is still something short on the realization side, for the whole cannot be realized in part, that is in time and space.

Every age has its own philosophy of life and sometimes several of them compete vigorously for first place, but this is not to be greatly regretted. Perhaps it is only significant of a larger meaning of life trying to get expression in life and it breaks through in different places. There is no harm in different philosophies, provided they are all true and show the real meaning and values of life. While philosophies change, the truth contained in them never changes, for truth is eternal and knows no limits of time and space. The manner of expressing this truth may vary greatly from time to time and I think it will, but this is only expressing the old truth in new form. It is the same truth, for truth is not determined by the manner of its expression, or by external relations. Truth

is an internal relation, and like reality is not exposed on the surface of experience, nor exhausted in time.

The manner of expressing the meaning of life differs, but life means the same always. It may not seem so to the ordinary views. The philosophy of any nation is the best that nation has known, felt and willed, and not at all the final edition of reality. Reality is eternal and never changing, but so far as it is revealed in time it comes forth in many editions, and some of these appear posthumously as far as certain individuals and nations are concerned. There are some just ordinary philosophies, and other editions *de luxe*, and just so with the lives of individuals and races, which are best reflected in their philosophies.

2 PHILOSOPHY AND THE LIFE OF REASON. Philosophy marks one more step of advance in the age or life of reason. Man now has passed through the hazy cosmic stage of his existence where he took no conscious part in the shaping of his own destiny, out into the somewhat clearer vistas of common sense, and then out into the broad areas of light shed by science. This is not the extent of his development, for lo, man is a philosopher too! This is not a new stage, for philosophy is at least half as old as the history of man. But the full meaning of this new point is far from being realized as yet. There are those who see in philosophy only what Protagoras saw, an expression of individual opinion. The expression may truly be individual enough, with all the limitation that this implies, but the truth therein contained, if there be any, is not of the individual, but of the eternal reality. For truth is universal. Man's reasoning will go on; it will become broader and deeper, just as it has in the past. No man has given a final edition of the universe in his philosophy. He may see the nature of reality and what significance it gives to life, but there is no last edition so far as manners of expression, or "systems" go. Reality will not change in time, but man's view of it will. Philosophy is man's view of reality, and it is limited by his experience and his nature. So great has been man's progress in thought that we wonder what will be his next advance. It will certainly be along present lines of achievement.

3 PHILOSOPHY AND THE MEANING AND VALUE OF LIFE. Who can say that the search for the meaning and value of life as a whole has no practical value? It has been said that philosophy bakes no bread. Truly it does not, but it will give the baker a point of view that might add significance to his life, and even lead greater significance to his bread-making as a part of his life activity. Philosophy gives a point of view and a standard by which all values of life are determined, and what could be of greater worth? Indeed we often have been reminded that whether life is worth living, depends on the liver,—the one who lives the life. If life is to be considered worth while it depends on the view we have of life in its relation to the whole. If man is only a meaningless cog in a great machine of no purpose, then life is not worth living; but if each person gains his significance by clearly perceiving his relation to the whole of life, or reality, then we see it in a different light altogether.

There is nothing in all the world we need to-day so much as a definite point of view in regarding life in its full meaning. Science has made wonderful time and labor saving devices, and now we must use these in transcending the limits of time and space, in order that we might regard life from a higher point of view. In other words, science has increased our facilities for living, philosophy must now increase our capacity for life. Science cannot do it all, although there are plenty of people who think it can. With a science there develop means and aids for living, but with philosophy there comes the guiding vision of the meaning and value of life. Are both not practical, both indispensable, each equally valuable?

Our age, as was suggested earlier in this volume, is marked by its scientific achievements along lines of commerce and industry. But what do "progress" and "achievement" mean without reference to a goal toward which we are moving? Every act of man implies action toward an end, and the great quest of philosophy is the goal or end toward which life as a whole is moving. With this end before us all parts of life become significant. Lose sight of the end and all is void, life becomes a hopeless vacuum, a mere dream of empty meaningless fancies. Is it any wonder that the cry comes from the philosopher that we must cease our meaningless haste and cal-

culate the point where we are coming out? Without an aim there is no progress and if the aim is wrong or incongruous with the larger philosophical view of life or reality, there is no such a thing as lasting progress. Much work has had to be undone because it was not well done in the first place. And much of what seems like progress to-day will have to be done over, or completely transform itself, so as to square with a larger view of life. Whether we consider life as a whole, or in its smallest part, there must be a goal, or purpose to give meaning and significance to itself. Philosophy is, then, not an impractical thing, but it represents man's search for the reality of his own being, which quest becomes, as we shall ultimately see, man's moral duty, as well as his greatest opportunity. It is the end, or purpose, that comes first in any action that is to have meaning, however paradoxical this may seem.

4 GENERAL SUMMARY. In this chapter we have seen that it is the specific purpose of philosophy to discover the aim, or meaning and value of life as a whole, and thus to render experience significant. The field or scope of philosophy includes the whole range of human experience, but instead of merely giving a causal explanation of these facts, it interprets their meaning and value, and this it does through its characteristic method of reflection, by which the relation to life gains its significance. Finally philosophy is extremely practical in the sense that it points out the aim or goal of life, and gives us the end to be attained. This gives direction, unity and significance to a world of otherwise disconnected and meaningless experience.



PART III

THE GENERAL RELATIONS OF SCIENCE AND PHILOSOPHY

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CHAPTER I

SCIENCE AND PHILOSOPHY COMPARED AND CONTRASTED

I AIMS OF SCIENCE AND PHILOSOPHY COMPARED AND CONTRASTED. Any further distinction between science and philosophy would be useless if so much did not depend upon it in the conclusion of this work. It is absolutely the first essential in clearing away the confusion in modern educational thought. Hence this part of our work gains its significance by reference to the whole of which it is a part, and hence is justified by virtue of it being part of that larger whole.

Life can be viewed from two angles of view. Either we may take the causal, or descriptive view of the scientist, or the teleological or purposive view of the philosopher. Both points of view are essential, and are related as part and whole to each other. By giving us the causal aspect of our experience, science enables us not only to see the relation of phenomena, but it enables us to shape our life accordingly. Not until the age of science was man very exact in his calculation of probabilities, nor was he able to control his experiences to any great extent. He was the victim of circumstances. But a change has come with the inception of science. Man is now able to control very largely his experience, and to foresee circumstances likely to arise that will affect his existence. So man has come to create and control his own destiny to a great extent, and this through the aid of science. But science can never tell what destiny is fitting or becoming to a man. This is left for philosophy. The aim of philosophy is to show the aim of life, its meaning and value. Science may multiply the material comforts of life a thousand fold, and all this by taking account of the laws of causal existence, but it can never assert or deny the value of life. It has no business with values. To consider facts as having value is to give up entirely the causal point of view of science. Science can in-

crease our means of living, but it cannot teach us how to live well, or that we ought to live well. It can teach us the causal relation of phenomena, but it cannot teach us the meaning of reality, or true being; it can show us the laws of thought, but it cannot give us the limits and values of knowledge; it can describe and explain its laws only as we would the movement and course of a stream; it can define the laws of mind action in the perception of a beautiful object, but it cannot reveal the nature of beauty; it can describe the sequence, but it cannot give the meaning of the truth. By substituting the word *philosophy* for *science* in the above sentence we reverse the order and meaning. Science is thus related to philosophy, as fact is to meaning, as law is to reality, as the whole is to the part. Science cannot do what philosophy is to do, any more than the part can do the work of the whole; nor can philosophy do what science is to do any more than we can substitute the whole for the part. And the reason for our inability to substitute one for the other, is that we have different aims or purposes. One describes life, while the other interprets it; one gives description of phenomena, the other leads to interpretation and appreciation. Their fields do not overlap, nor interfere with each other. They have divided the realm of human experience with mutual advantage to each other.

2 SCOPE OF SCIENCE AND PHILOSOPHY COMPARED AND CONTRASTED. The scope of science is limited to the facts of human experience. Science has entered every realm of experience, and has generally succeeded in reducing the chaos of fact to orderly sequence and law, but it has always left and always will leave this field of fact as fact, without attributing to it value or meaning. The philosopher enters the same field with the scientist and instead of setting to work to reduce experience to law and order, he proceeds to discover the meaning of this experience. He is concerned not with the external order and relation of things, but with the internal relations of meaning, purpose and values. It is one field in which we operate for the purpose of discovering order, sequence and law; it is quite another in which we seek the meaning of these phenomena, or their relations, not to each other merely, but

to the whole of life.

The same facts of life give rise to two sorts of problems, or two fields of inquiry; the one field is that of description and external relation, the other is that of interpretation and appreciation; the former is the world of fact, the latter of values, and it is by reference of the former to the latter, that of the part to the whole, that the world of experience gains its significance, or meaning. In this way we see the relation of the fields of science and philosophy.

3 METHODS OF SCIENCE AND PHILOSOPHY COMPARED AND CONTRASTED. The methods of value in reaching a descriptive and explanatory, or causal view of the world, are observation, comparison and generalization, while that employed in rendering a teleological, or purposive view of the world is reflective. The former methods are suitable for asserting relationships between facts and phenomena; the latter discovers inner connections of meaning and purpose. If I want to discover how a thing acts, or what it does, I employ the methods of causal science; if I want to know what a thing means, or its value, I have recourse to the method of teleological or normative science, that of reflection. Since the business of philosophy is that of seeking inner connections, it has only incidental use for methods whose values lie in pointing out purely external relationships, i.e., connection between things, not purposes.

4 DESCRIPTION AND INTERPRETATION THE TWO ASPECTS OF REALITY. But we have tried all the way along to keep from making a purely arbitrary and artificial distinction between science and philosophy. There is no essential conflict between facts, the data of science, and purposes and meanings, the data of philosophy. We have insisted that these are only the two aspects of the same reality, the temporal and eternal aspects. There is no more conflict here than between the outer and inner curvatures of a circle, its concavity and its convexity. Indeed facts and purposes are related as part to whole, and there is no conflict or antagonism here. The two views of life are equally important; they are the two aspects of the same reality. The world of science and the world of philos-

ophy, fact and purpose, represent the external and internal meaning of the same idea. Reality neither consists in facts alone nor purposes alone, but a unity of facts and purposes. Facts and purposes are, then, the two sides, or aspects of the same reality, the external and the internal meanings. In reality facts and purposes, external and internal relations, are harmonized, by being discovered to be functional parts of the same organic whole; the essential difference being that the one aspect is temporal and partial, while the other is eternal and whole.

There is another way of distinguishing science and philosophy, which will no doubt be of greater value for our particular purpose later, in tracing the general philosophical and ethical aspects of education. This distinction has already been implied in the foregoing. Philosophy is concerned with the aims of life; science with the means for realizing these aims. Who does not recognize the folly of choosing certain aims, while at the same time refusing to adopt the means for their realization? Too often in life we do not have clearly in mind the ends or aims of life, and so are unable to choose intelligently the means. In as much as the means chosen depend upon the aim to be realized, it becomes an important matter to know what these aims of life are. Nor are all means equally serviceable for given ends. Some must be refused altogether.

It has now become clear that philosophy is concerned with the aims of life while science provides the means. Instead of deploring the advance of science, the philosopher welcomes it, for he sees in such developments the only possibility of realizing the aims of life. He does, however, deplore the modern tendency to substitute facts for values, as is likely to be the case in an age of such rapid material progress and discovery as ours.

There is such a thing as making tools without knowing the use to which they are to be put, but such procedure would generally be regarded as folly. We do not always see so clearly that we may fail to keep the proper balance between means and ends, methods and purposes. There is of necessity an end for every means, but for lack of clear vision the wrong end may be selected, or indeed, as is often the case, a means may be substituted for an end, and thus arises the con-

flict in modern life, and particularly is this noticed in such fields as religion and education. It is characteristic of philosophic myopia that a means be made to serve as end. Now when this substitution of means for end is made with no higher aim or purpose in mind there is certainly danger ahead.

There is just one cure for this substitution of means for ends, or purposes, and that is clear thinking. Clear and high thinking will lead from fact to its other, from part to the whole it implies, and when this whole is once perceived it becomes the meaning of all life, the standard of all values, the fulfillment of all purposes. Means and methods are then chosen with reference to this end, and no substitution of means for end is allowable, except as it be a more immediate aim, and justifiable as a compromise to the limits of space and time, between full and partial realization. The substitution of a means for end, or of a lower for a higher aim, is not only a blunder, but a crime. We shall hear more about this in a later stage of this inquiry.

CHAPTER II

GENERAL SUMMARY AND CONCLUSIONS OF THE FIRST THREE PARTS

I SUMMARY OF THE RELATIONS OF SCIENCE AND PHILOSOPHY. It is now time to make a general inventory of our gains up to the present time, for we have now come to a parting of the ways. We are to regard the world of educational experience from the point of view of the philosopher, and then from the special point of view of the ethicist, or moral philosopher.

In our summary of Part I we drew general conclusions as to the aims, scope and method of science. In Part II we did the same with respect to philosophy.

The aims of science and philosophy are alike in that both attempt to give an account of human experience, but each gives a different account of this experience. Science remains satisfied when it has succeeded in connecting in orderly sequence or law the phenomena of life, while philosophy takes up work where the scientist leaves off, with his generalizations of experience, and proceeds to determine their meaning for a larger life. In this sense, then, the scientist is limited to the facts of experience both at the beginning and the end, while the philosopher is so limited in the beginning, but the end of his quest brings him to a world of values rather than facts, interpretation rather than explanation, meaning rather than description.

Science cannot satisfy all the demands of life, for it reads no meaning and value into it. Philosophy cannot provide the means, for its search carries it beyond the value of time and space limitations, or causal and sequential relations. Both fields are equally essential, but each has its decided limitations for life. We must remember, then, that wherever in the future we are concerned with aims, we have to call on philos-

ophy, and upon science, when we are concerned with means and methods of realizing these aims.

The scope of philosophy differs from that of science in that it uses the facts of human experience merely as the data out of which to construct a larger life, while science uses these facts only in the interest of connection, description and explanation. The field of science is a temporal series of phenomena, while that of philosophy is an eternal system of purposes and values.

The methods of philosophy differ from those of science as a direct result of their different aims. The descriptive, explanatory method of science consists in showing how fact A is related to facts B, C, D, etc.; or how the fact A is explained by its falling under the head of generalization, or law X. The reflective method of philosophy consists in showing how the facts A, B, C, D, etc., and the law X are related to the whole of life, or how the part is related to the whole, or what the significance of the fact or law is for life.

And finally it is the philosophical view of life that gives significance and purpose to our actions, that gives us a goal to work toward. And it is science that makes at least partial realization of this goal possible. Science and philosophy are always related to each other as means to ends, as part to whole, as facts and their fulfillment.

2 RELATIONS OF THE FIRST THREE PARTS TO PART IV.
We are now to launch out into a special field of inquiry, and we cannot afford to neglect the conclusions already arrived at. Indeed these conclusions form the very basis of our further inquiry. Our results so far accomplished are a clear separation of the fields of science and philosophy, as to aims, scope and methods, and the general part they are to perform in life as a whole. Since this distinction has now been made, we have no more concern with science except incidentally. Our purpose now is to show how philosophy is related to the business of education. We do not need to draw science along with us any further, since it has served its purpose for us here in aiding through comparison and contrast to bring out the relative functions of science and philosophy for life. Our further inquiry will be more distinctly philosophical.

Now that we know the relation of philosophy to life as a whole, it will not be difficult to show the relations to the particular field of educational experience. The relations here will be less generally stated, and perhaps much more enjoyed by some people than the foregoing part of this inquiry. What has education to do with philosophy? What business has the philosopher with the field of education? Can the philosopher aid the educator in any way; if so, how? These are some of the questions that will occupy our attention in Part IV. In Part V we will narrow the questions still more and attempt to find the answers that the particular branch of ethics would give to them. Philosophy now says good-bye to science, and finishes the journey with education, enjoying frequently the sweet recollections of his former associate.

PART IV

THE RELATION OF PHILOSOPHY AND EDUCATION

CHAPTER I

THE PHILOSOPHICAL ASPECTS OF EDUCATION

1 RELATIONS OF PHILOSOPHY AND LIFE. Any account of the whole of experience certainly includes all the parts, and education is one of the parts. Then, since science attempts to describe and explain all phenomena of life, there would certainly be a science of education. In like manner, and since philosophy aims to discover the meaning and value of all life and experience, there would also be a philosophy of education. We are here concerned with the latter view of education.

2 THE PHILOSOPHY OF EDUCATION AS THE MEANING AND VALUE OF EDUCATION. A philosophy of life attempts to give the meaning of human experience by showing its relation to the whole, which is implied in the part. The philosophy of education attempts in like manner to construct the meaning of the whole out of the parts, or to show the meaning and value of educational experience for life as a whole. There is grave danger that the parts blind our eyes to the whole, and hence cause us to lose sight of the larger significance of our experience, which is always in part. There are many to whom the penny looks larger than the moon, and who could scarcely be led to alter their opinions. We are constantly reminded that when the present is so fleeting and exacting, that we have not time to bother about the past or future. Perhaps the future is no better than the present, but certainly the whole must be greater than the part. But it is so easy to just drift along and not have to struggle at all, and so we drift, but whence our origin or whither we go, is a matter of no great concern to countless numbers. If these questions do concern us they are usually answered by blind faith, rather than from an enlightened view of life as a whole. We are so wayward, so prodigal. We need to find out the meaning

of life and then we will make better use of our time. We need more rationality and less sentimentality in education, and perhaps in the other regions of human experience as well. There is nothing quite so potent in driving away sentimentality and blind faith as a wholesome philosophy of life. When all experience is counted of equal value and no selecting or hierarchy of values is made, we are certain to substitute the part for the whole, and particularly because it is more immediate and tangible. Tangibility spells reality for a great many short-sighted people. And not a few of these people have much to do in directing the educational affairs of our state and nation.

A philosophy of education will serve as a balance wheel in the educational system. It will substitute meaning for facts, values, and purpose for external connections, and give a goal to work to, which obviates the necessity for setting up a means as an end in itself, thereby robbing the means of its real serviceableness for life as a whole. A philosophy of education will prevent our working at cross purposes by keeping the idea of the end in mind, and selecting the means accordingly. This will aid the clear thinking so much needed in education, and which was emphasized in the Introduction.

3 EDUCATIONAL EXPERIENCE. We have spoken of education as though it defines definitely a certain area of human experience. But this area is not so clearly viewed by many people. We must define the scope of what is included in education in this dissension. In its broadest sense education is almost synonymous with the whole of our experiences, for there is no experience that cannot be said to have educational significance, either positive or negative. But we must more definitely define its limits. It will be granted that all experience has educational bearing, but as we use the term here it means "systematic" education, to use Spencer's phrase. The unsystematic, or "fortuitous" education is not under discussion here. More strictly still we mean by systematic education, institutional education, or the kind that is established and organized by the church or nation, and provided for by private or public money set aside for this purpose. Thus viewed education becomes one of the functional organizations of society

for the promotion by organized effort of certain aims of life. What these aims or purposes are, can be answered better further on in our discussion.

4 VARIOUS PHILOSOPHICAL ASPECTS. We have spoken so far of the philosophy of education with no attempt to discuss at length the particular branches of this field. A philosophy of education attempts to show what education means, and what are its values. We have already seen that philosophy is a very broad term. In the interest of a fuller account of life, philosophy has divided its field into several different branches, each one of which has its special aims and purposes.

Philosophy includes metaphysics, or the theory of being, or reality; epistemology, or the theory of knowledge; logic, or the theory of truth; ethics, or the theory of the good; æsthetics, or the theory of beauty. Every problem of life can be questioned and answered either from the descriptive or from the normative points of view, both by science and by philosophy. From the philosophical side we can view the matter from the more acute angles of metaphysics, epistemology, logic, ethics, æsthetics and the philosophy of religion. So when we speak of the philosophy of education we mean to include all these points of view with respect to education. We shall view education from these several philosophical aspects,—first, the metaphysical aspects of education. It must be remembered, however, that only one of these points of view, namely, ethics, concerns us in any but a general way in this work. There is much to be gained from a brief look at education from these several points of view.

CHAPTER II

THE METAPHYSICAL ASPECT OF EDUCATION

I METAPHYSICS AN EFFORT TO THINK CLEARLY. Metaphysics has been defined already as the search for reality or true being, and the starting point is always the experience of life, and this includes education. It ought to be clear, then, that metaphysical inquiries are of vital concern to education. For each fragment of experience must be judged in the light of the whole. Metaphysics asks concerning educational experience: What does it mean for reality as a whole? In what sense is it real?

James says that metaphysics is nothing more than a very obstinate effort to think clearly. It takes nothing for granted without careful consideration of what such an assumption means for the whole of reality. It must be consistent with the whole of reality or it is pronounced false or untrue. All ultimate or final questions must be tried at the courts of metaphysics before the bar of reason. These ultimate questions may just as well arise in the field of education as anywhere. But usually we do not stop long enough in education to ask questions, and if we do we do not take time enough to answer them so thoroughly. Kant thought that perhaps the chief value of metaphysics comes not from our settling finally any great problem, but from the fact that in the attempt our own thought is made clearer. If this much is done in our metaphysical inquiries we certainly ought to take courage. The man was probably wrong, then, who defined metaphysics as the art of putting things that everybody knows in language that nobody can understand.

2 EVERY ONE HAS A METAPHYSICS OF SOME SORT. Metaphysics, since it is concerned with the first principles of all physical and mental existence, is at the very bottom of all

our thinking, and whether wittingly or no every one of us has a metaphysic, though it may be a poor one. As Emile Faquet says, "*Il resulte que ceux que sont le plus antimetaphysiciens sont metaphysiciens encore*" (*Pour Qu'on Lise Platon*, p. 97). "Those who are the most anti-metaphysical are metaphysicians still." It is becoming to a man to have a systematic way of looking at life as a whole, and this involves a metaphysic.

Metaphysics to the Germans has long been the very groundwork of all philosophy, since it is the branch concerned with the first principles of existence. Ethics was the groundwork of philosophy for the Greeks, while psychology was for a long time the foundation of the English schools. (Cf. Cushman, *History of Philosophy*, Vol. II, p. 332.)

3 METAPHYSICS AS A CRITICISM OF THE PRINCIPLES OF SCIENCE. Metaphysics criticises the first principles or presuppositions of all science, both descriptive and normative. Science takes many things for granted, metaphysics takes nothing for granted. Time, space, and matter are taken as real by science, but metaphysics tries to discover in what sense they are real, if real at all. We shall see later that logic, ethics and æsthetics make similar presuppositions at the beginning, and it is the business of metaphysics to deal with these also. It is not the business of metaphysics to displace the other sciences, or to show their respective boundaries, but rather to question the soundness of their fundamental conceptions or principles in the light of being as a whole. The sciences gives the facts of experience in related and connected order, but from different angles, metaphysics must give the view of experience as a related whole.

4 METAPHYSICS THE SCIENCE OF SCIENCES. But metaphysics does more than simply criticise the principles and presuppositions in their relation to the whole. It correlates the results of the special sciences into larger generalizations. Some have thought that it is the final aim of metaphysics merely to give a systematic account of all the results of science, and so it has been called the "science of sciences." Metaphysics would, according to this view, contain the widest possible

generalizations of science, and nothing more. Further than this Spencer would not go, for all the rest is of the unknowable. Science exhausts the possibilities of knowledge and philosophy can go no further than to systematize these special results into a larger or universal whole. Titchener says, "Metaphysics is the discipline that undertakes the complete synthesis of scientific results." (*Outlines of Psychology*, p. 364.)

Metaphysics, according to the view here taken, goes much farther than a criticism of the first principles of science or a systematic generalization of the results of all science. It is constructive as well as destructive and polemic. It goes out in search of principles of its own. But instead of searching for the principles of the part represented by the different sciences, it searches for the principles of true being, or those upon which the whole universe is based. It asks what are the basic principles of reality. How are these related to the fragmentary experience of life? These are profound questions, and are important in every walk of life, so much so, that if we do not go to the trouble to prove them, we assume them in spite of our denial, thus asserting the truth of their existence. The principles, or causes, here under consideration are not temporal, but eternal. They are real for they are true for all time and place, and for everybody.

The real cause of the universe is teleological or purposive, not material or sequential. There are several different kinds of causes, but there is only one final, or the first cause, and metaphysics is in search for this first cause, or ultimate principle of the universe.

5 METAPHYSICS A SEARCH FOR FIRST PRINCIPLES. We see, then, that metaphysics is the universal ground of all knowledge, as well as a criticism of the first principles of science, a systematization of these into a larger group of generalizations, and a search for the ultimate principles of existence or the first cause, or final principle of reality.

Metaphysics, as the science of being or reality, is the foundation of knowledge, for it would be meaningless to ask the nature and extent of knowledge, without first asking what there is to be known, or what is real. It might just as well

be asked what is real if it cannot be known? How are we to approach the real if we cannot know it? This shows very clearly the close relationship between metaphysics, as the science of being or reality, and epistemology, or the science of knowledge.

6 METAPHYSICS THE SCIENCE OF REALITY. Metaphysics is an inquiry into the first principles of reality, or final causes, true being. This is its field, but what about the gains it has made? In answering this question I stick to my point of view of idealism, and the results must be judged accordingly.

For idealism the ultimate, or final principles of being or reality is purpose, or idea. Hence the term idealism. All reality is definable in last analysis in terms of ideas or purpose. The final cause for which metaphysics is in search can be defined only in terms of ideas. But since ideas have reference both to an external and to an internal world, to fact and to meaning, we shall refer to the external and the internal meaning of our ideas. It is the external meanings of our ideas that are traced in the descriptive sciences, while the internal meanings are traced in the normative science. The external reference of ideas is to the fact world, the internal reference is to purpose. Our chief concern is with internal relations of purposes, a relationship which science cannot follow.

Idealism answers the question as to what is the final principle of the universe, or the ultimate nature of the universe, and ground of knowledge by saying that free intelligence is the only cause that really explains anything. It is the only means of explaining the changes that take place in the world without conceiving time as a something independent of our experiences. The latter confusion gives rise to the mechanical conceptions of nature, which gives us nothing more than the sequential order of phenomena in nature. Intelligence is the only cause that is a satisfactory explanation of things, and is the only ground for the uniformity of our experience. "Mechanical causality vanishes with the independent existence of time, which is its fundamental condition." (Bowne, *Personalism*, p. 214.)

The whole structure of the phenomenal world of science thus is seen to rest on the supposition of the reality of time and space. Science has a right to make such a supposition of

the reality of time and space, but metaphysics must determine its relation of the whole of reality.

7 APPEARANCE AND REALITY. Just as soon as the idealist speaks, the whole army of his opponents is ready to pounce upon him. A man must indeed be very sanguine, if not altogether presumptuous, to attempt to deny the reality of the world of common sense and science, as against the world of ideals and purpose. The task of idealism is not to deny the reality of the world of common sense as real, but to show in what sense it is real, or how it is related to reality as a whole. The world of appearance, or sense-perception, is here not denied as real, for it has a reality. In what sense is it real? This is the great ontological question as to the relation of the world of sense to that of reality as a whole. The old attempt to disprove the reality of the sense world has been given up as unsuccessful by most metaphysicians, and the vital problem has come to be that of showing the relation of the world of reality as a whole.

The plain man views sensation as altogether too simple a process, and one that carries with it, its own meaning and interpretation. According to this view sensations not only give the immediate data of experience, but their own interpretation as well. Thought is thus overlooked, and it is an easy matter to overlook the function of thought, for it is so fleeting in its function, but we stand a chance of seeing the meaning of things only when we realize the organizing and rationalizing power of the mind itself. Thus we do not so much perceive our world as we think it. Perception is a very complicated process and never gives us the reality of things that we are all in search of, but only the partial view out of which we all make our world. Thus we see that reality is not immediately given but arrived at only through the thought process.

The phenomenal world is not an unreal world but one which exists alone for thought or the intellect. It is the time and space world, and has its reality, only in its being known. It is not a nonentity else it could not be known, but it has being only in its being known. This world of time and space is a manifestation of personal being that expresses himself in

this way in the world of time and space. The old conflict between Heraclitus and the Eleatics is not possible of solution except on grounds of personalism, or on the notion that reality is personal. The world is both permanent and changing. It is changing viewed from the point of view of time and space, but it is permanent when viewed from within. There must be something that is permanent, otherwise change would have no meaning at all. The changeless condition is in the mind itself and it is the mind that knows the changing order of temporal reality.

The only real cause that can explain anything is personal cause which we can know. There is no fictitious, unknowable noumenon that cannot be brought into the cognitive relation, that cannot be known. The only reality is that of experience, but our experience is only partial, but none the less real on account of its incompleteness. A more nearly complete experience would give us a reality of a larger content but not a true reality. The larger reality expresses itself in the experiences which we come to know. In this way we know reality.

8 THE CARDINAL PRINCIPLE OF VOLUNTARISTIC IDEALISM: REALITY THE ABSOLUTE WILL OR PURPOSE. The cardinal principle of idealism is, then, that being consists in being known, not known by any individual in time and space, but the absolute intelligence of the universe. To be real is to stand in cognitive relation to this infinite intelligence. The real world thus consists of ideas, and exists only in thought. This world of reality manifests itself in the time and space world as purpose and intelligence, but never is the whole of reality thus given, for this would mean the whole is given in the part, which is a contradiction.

Thought is the essential nature of reality, and it is intelligent or purposive action that characterizes thought. It is by emphasizing this purposive aspect of the world that the essential feature of voluntaristic idealism is revealed. The trend of idealism is from that of emphasizing the rationality of the universe to an emphasis on its purposive aspect, yet both are essential aspects to the world of reality.

Idealism explains everything in terms of intellect. Itself

it does not explain, since it is the essential nature of reality itself, the first principle of being. Bowne says, "Intellect explains everything but itself. It exhibits other things as its own product and as exemplifying its own principles; but it never explains itself. It knows itself in living and only in living, but it never is to be explained by anything, being itself the only principle of explanation." (*Personalism*, p. 216.) We cannot go behind self-conscious existence to any further explanation of things, for self-conscious existence is the ultimate explanation in itself, and to attempt to go farther back is simply to explain the explanation and this pushes us into barren tautology. Thus we see that for Idealism, "Living, acting intelligence is the source of all truth and reality, and is its own and only standard," and that "knowledge arises in the mind only through its own activity." (Bowne, *Metaph.*, p. 425.) The same author says one of the main theses of Idealism is that of "denying all extra mental existence and making the world of objective experience a thought world which would have neither meaning nor possibility apart from intelligence." (*Metaph.*, p. 423.)

9 THE PROBLEM OF ONE AND THE MANY: FACT AND PURPOSE. When any such a view as the above is held about reality there at once arise a good many problems. Perhaps first in importance is the problem of the one and the many. Is reality one or is it many? This question has always stood as one of the persistent problems of philosophy and there is yet no universal agreement as to the answer. Every answer of this sort must be given in the light of what is thought to constitute the reality of the universe. So we must answer this question in the light of the foregoing statement as to the nature of reality. Reality is the whole, about which so much has been said in this volume, and its nature consists in active intelligence, which needs no other by which to explain itself. The many are simply the different aspects of reality as viewed in the world of sense, in time and space. The whole of reality is not expressed in these successive partial views, but they form the starting point for the view of reality as a whole, which is one and self-contained, not many. The part always implies the whole, but the whole is explained only by the inner

relation of all the parts. The many has no significance, as noted above, except as time and space are regarded as real.

10 THE PROBLEM OF TIME AND SPACE. Time and space are only the forms in which the world reveals itself to our intelligence. Time and space would mean nothing except as the world is viewed in part. If our experience were of the whole, rather than the part, time and space would have no meaning, but in a world of personality where each one is only a part of the greater whole, or the absolute intelligence, we see only in part. Since we see the world as parts by virtue of our being a part of the whole, we necessarily see the world in sequence, in time and place.

11 THE RELATION OF MIND AND MATTER. Probably no less a perplexing question is that of the relation of mind and matter. Like the other questions, they get their significance and their answer by reference to reality as a whole. The real question about the material world is not, does it exist, but in what sense does it exist, or is it real?

This question has been answered already from our point of view. Matter does not possess its reality by virtue of its existence in time and space, as common sense would say, but rather its reality lies in its relation to idea. We have said that matter is the external meaning of our idea, or the partial meaning of our idea expressed. This time and space world, which is the framework of the world of matter, is created in the interests of our will, which demands that the parts of our experience be expressed in their unity. Matter is not properly defined when it is termed the object of thought. Rather matter is the external reference of my idea, it is the partial fulfillment of any meaning or purpose in time.

12 THE PROBLEM OF THE INFINITE. The problems already raised suggest the relation of the finite and the infinite, and the answers to the former suggest the answer to this latter question. The finite is the limited view of reality, reality conceived in its external relation of time and space. The whole cannot be conceived as existing in time, for this would mean a substitution of part of the whole. Reality is the purpose of

the universe, and purpose needs not time or space for its existence. Indeed, as we have noted already, time and space are themselves creations of our own interest or purpose.

The infinite purpose is the reality, and reality is infinite, for it has no limits of time and space. Such a view is logically necessary since reality must, whatever its nature, be whole, or the other of our fragmentary experience, and the whole cannot be expressed in time and space relations.

Hegel regarded the whole world as the expression or relation of a plan, or an idea. This plan is revealed in our successive movements toward the other implied in our experience. Such a universal plan can never be realized completely in experience, because the part can never stand for the whole, and the whole cannot exist in time. It is in this sense that the infinite is represented in the finite.

13 THE PROBLEM OF SELF OR PERSONALITY. Probably the most important concept of metaphysics in its relation to education is that of the self, or personality. This is the central problem of education. Personality, or the individual self, is the infinite, expressed in the finite; it is the union of the internal and the external aspects of experience, relation of the fact and its meaning, the union of the external and internal meaning of our ideas. Horne says, "Idealism finds ideas and purposes to be the realities of existence, and personality, which is the union of ideas and purposes, to be the ultimate reality. These views are in contrast with all forms of materialism which would reduce ideas and purposes to some form of physical existence." (*Idealism in Edu.*, p. 7.)

14 GOD, IMMORTALITY, AND THE SOUL. The questions of God, immortality and the soul are religious concepts and are metaphysical in so far as the reality of the objects to which they refer are concerned. These are largely questions of value for governing the conduct of man and are hence ethical or religious. We may consider them to better advantage at another time.

15 SUMMARY. Let us briefly summarize the main points of this chapter. Metaphysics represents man's greatest effort

to think clearly. The principles governing our way of viewing the world may not always be very well defined, but we cannot get away from the metaphysic on that account. A theory of first principles, or a metaphysic, is involved in our every action and word, for each involves certain beliefs as to the world order, and our reasons for our preference for these beliefs rather than others, constitutes our metaphysics.

Bowne says that, "There is a growing insight into the fact that metaphysics underlies all science." It is a part of the function of metaphysics to criticize the first principles, or ultimate assumptions of science. Another part of its work is to generalize the results of all science. But the chief work of metaphysics is its search for the ultimate principles, or the true nature of reality, and it is in the light of such a view that the first principles of science are criticized, and its results generalized. Metaphysics is, therefore, more than a mere "science of sciences." It is a science of reality, and reality is not expressed as a whole in the world of fact. It thus becomes clear that metaphysics is the ultimate ground of all knowledge, for knowing is out of the question until the problem of reality or being is settled, for the question of the reality of knowledge is also at stake. Knowledge is thus first assumed and then proved.

The answer that the metaphysics of idealism gives to the question of reality is that its ultimate nature is intelligence, infinite personality, the absolute will, which expresses itself in the finite, in the individual self or personality. The reality of experience consists in its relation to this infinite personality or will, and such relationship is expressed in our purpose, which is the union of the external and internal meanings of our ideas. Thus reality is one and unalterable, and the many are only the appearance or the way in which the one manifests itself in a temporal order of things, or to a finite experience. The reality of this world of appearance, or space-perception, consists not in its objectivity, but rather in its being known not by the part, but by the absolute will or intelligence, which is the complete fulfillment of our meaning and experience. For such a conception of being, time and space are regarded as merely subjective forms of our experience. The real or the absolute, is thus not in time but includes all

time. In such a conception the problem of the self or personality becomes central.

16 EDUCATIONAL IMPLICATIONS OF METAPHYSICS. But what meaning has such a metaphysic for education? The educator must start, like all other finite beings, with the facts of experience, and the nature of the human mind. These facts must be compared, unified and related organically in the larger whole, and this must be interpreted in the light of universal being or reality. We are not to begin the work of education by stamping out the evils of child nature, but by relating all parts of our nature into an organic whole. This is the only way all things find their place in relation to the whole. There is no other way to determine what is good and what is bad.

Our metaphysical presumptions profoundly influence our whole view of life and of education. For Plato all education was to be based on ontology, or an understanding of the true nature of being, or reality. (*Encyclopedia Brit.*, Vol. XXV, p. 423.) All metaphysical presumptions influence education. Some of these exert a more special influence on education. What there is about the nature of reality that enables us to have community of experience is an important problem concerning life as a whole, yet is not so central in its relation to education as others, for instance the self or personality. Metaphysics deals with the presuppositions of the material and mental world, but the latter are of more special importance for education. Yet all these views must fit into the view of reality as a whole. Our theory of the origin and destiny of the world, our cosmology, is essential to a view of reality as a whole, but this is not so important for education as is that of our relation as persons to this world.

There is another metaphysical problem that greatly concerns the theory of education, and that is whether reality is one or many. Monism and pluralism give different answers to this question, and these answers greatly affect our view of education, though it is not generally thought to be of such consequence. Pluralism is the metaphysical doctrine that the relations of things are external, not internal, and so the same thing can be in different relations at different times. Monism

holds that the reality of relations is confluent in all things and that relations are internal and one, everything is present to everything at all times, its only relation being that of its meaning for the whole. These metaphysical doctrines of pluralism and monism usually give rise to two rather sharply defined views of education, the one individual and the other social.

I hope the conception is growing that science cannot settle all the questions and problems that arise in the field of educational experience, for "science concerns itself with what is accessible to proof, not with what may possibly be true." (Palmer's *Field of Ethics*, p. 9.) Now the field of what may possibly be true is the field of philosophy, and the present chapter should have led us to see that metaphysics, one of the philosophical disciplines, is concerned with a view of reality that profoundly influences all our theories of education and life.

CHAPTER III

THE EPISTEMOLOGICAL ASPECTS OF EDUCATION

1 HOW CAN ONE THING KNOW ANOTHER? The central problem for epistemology is, How can one thing know another? If this problem cannot be answered, then the search for the reality of the universe is meaningless so far as its being an object of knowledge is concerned. Palmer says, "The function of epistemology is to determine the extent and validity of the knowledge which consciousness affords." (*Field of Ethics*, p. 13.) These might be regarded as two ways of stating the same problem, for in determining limits and values of knowledge, we determine whether one thing can know another or not.

Plato regarded this search for being through knowledge as the greatest delight or pleasure of the world. He says in the *Republic*, that "The delight which is to be found in the knowledge of true being is known to the philosopher only." (Jowett's, p. 292.) This claim for the pleasures of the intellect was not original with Plato, however, for Socrates had already given expression to the view that the exercise of the power of knowledge was man's greatest joy, but as we shall see Socrates places a certain limitation on knowledge, which had to be removed before any great gains could be made from this source.

2 RELATION OF EPISTEMOLOGY AND METAPHYSICS. It has been suggested already that the fields of epistemology and metaphysics are not entirely separate, for the problem of being cannot be made intelligible except through the understanding, otherwise we would not know being when we found it, no matter how it was found. We are obliged first to assume the validity of knowledge in order to begin our search and prove its value by the efficacy or fruitfulness of its search.

Being and knowing are thus seen to be related intimately. Fullerton says that "Epistemology is the study of the 'nature of knowledge and its scope,'" and later he states that "it should be remarked, in the second place, that the investigation of our knowledge inevitably runs together with an investigation into the nature of things known of the mind and the world." (*Introd. to Phil.*, p. 248.) The same close relation is observed by Prof. E. B. Titchener, who says, "It is the problem of epistemology, or the theory of knowledge, to explain how the concrete experience, originally one, has come to be divided up under an objective and a subjective aspect; what there is in the nature of truth to make this division necessary and helpful; and what measure of truth attaches to each side of the division at the present stage of the world's thought. It is the problem of metaphysics, which unifies and harmonizes the principles and laws of all the sciences, to make the conclusion reached by way of the two abstractions from experience just mentioned, the conclusions of both the natural and the mental sciences and in their light to explain the given fact from which they are derived, the concrete experience self." (*Outlines of Psychol.*, p. 367.) How is this view greatly different taken by H. Sidgwick. He says: "I do not myself regard the separation between Epistemology and Ontology as other than formal and superficial; for in the main, when we have decided the most important epistemological questions we have in my view implicitly though not explicitly decided the most important ontological questions." (*Phil., Its Scope*, etc., p. 112.)

3 RELATION OF EPISTEMOLOGY AND PSYCHOLOGY. There is another distinction that should be made before we go into the problems of epistemology. I refer to that between epistemology, as the science of the limits and value of knowledge, and psychology, which is the science of the states of consciousness. Psychology never grows so ambitious, when it understands its business, as to ask about the limits or value of knowledge, for as we learned in Part I of this volume, psychology is a descriptive and explanatory science purely, and as such, it is not concerned with values, or ultimate principles, but alone with a mere description and explanation of the way

the mind works under certain conditions. Epistemology, on the contrary, begins with these results and attempts to find how it is possible for consciousness to know any object at all, and to know itself. The world somehow has become dichotomized, or cut into two parts, the knower and the known, and it is the business of epistemology to see how they can be put together again in one whole, and it is the business of metaphysics to answer in what sense these two worlds are different, or if only different aspects of one real world, then what the nature of this real world is.

So long as psychology minds its own business as a descriptive science, it will never have any trouble with epistemology, which is concerned with ultimate principles of human understanding, and how consciousness can know its objects. Psychology has to assume that consciousness does know its object, just as epistemology must consider the results of psychology before setting out on its journey to find the limits and values of knowledge.

4 THE CENTRAL PROBLEM OF EPISTEMOLOGY. The great question for epistemology as we have said is, what is the extent and validity of knowledge? This is not a very simple question, nor is it meaningless, since no less a matter than our relation to reality is at stake in our answer. There have been many different answers to this great problem all down the ages. Some have denied even the possibility of knowledge, and asserted that all is opinion. Of course such rank scepticism commits suicide in that it assumes to know at least what is asserted in this proposition.

The central difficulty seems to be after we have once assumed a certain amount of knowledge, whether its range is limited to a knowledge of the particulars of our experience alone, or whether we can know the universal as well. In other words, can we know what is not given in an act of perception, that is as a concept, or general idea? The logical difficulty involved here is, with what degree of certainty or truth can a proposition be made about a content not presented immediately to consciousness in a single act of perception? Some have asserted that knowledge is limited to perceptive acts of experience, others that the relation between these simple acts

of perception can also be known, and still others that the relation of these to a content never given as a whole in experience can also be known. There is a narrow limit beyond which some people refuse to go in trusting the validity of knowledge, while others remove practically all limits from knowledge, and assert that we can know even God. It is on just this question of the limits and values of knowledge, that most philosophies come to divide most sharply,—it is the point of greatest divergence in a great many cases. Knowledge presents a great many difficulties. When it is said that we know a thing, what does this mean? It certainly implies a certain relationship between a perceiving consciousness and a perceived object, but it does not yet appear what sort of relationship is involved. These problems do not arise in the mind of the casual observer. As Plato says, "But people imagine that they know about the nature of things when they do not know about them, and, not having come to an understanding at first because they think they know, they end, as might be expected, in contradicting one another and themselves." (*Works*, Vol. I, p. 442.)

With the common observer things are what they seem, and that is the end of it. We open our eyes and see, and seeing is for such a one, believing. It has been noted by more careful observers that the senses are very deceiving. Anaxagoras asserted many centuries ago that "because of the weaknesses of our senses we are unable to discern the truth." (Cf. Bakewell: *Source Book*, p. 53.) Plato also asserted that "The eye and the ear and the other senses are full of deception," and only the mind disciplined in high thinking can attain true knowledge (*Phaedo*, p. 226). There is, then, a certain weakness in the senses so far as their being a source of knowledge is concerned. This shortage may not be so much due to the imperfection of our sense organs, as to lack in pure sensation of the universal element so conspicuously absent in sensation. Professor Dewey says that "Sensations, *per se*, never enter into knowledge. Knowledge is constituted by interpretation of sensations, that is, by their idealization." He says further that "Knowledge is not the process by which ready-made objects impress themselves upon the mind, but is the process by which self renders sensations significant by reading itself

into them." (*Psychology*, pp. 138, 143.) Further, "Memory and perception deal with the particular object as such. Imagination deals with the universal in its particular manifestation, or with the particular as embodying some ideal meaning, some universal element." (*Psychology*, p. 201.) Hyde expresses a similar view when he says, "Sensations with no intelligence acting upon them, and reacted upon them would give no knowledge within and no world without." (*Practical Idealism*, p. 34.) This distinction between sensation and a complete act of knowledge does not always remain so clearly in our minds. May it not be that something worth while is omitted in the following statement from Professor James? He says, "Out of what is in itself an undistinguishable swarming continuum devoid of distinction or emphasis, our senses make for us by attending to this motion and ignoring that a world full of contrasts of sharp accents, of abrupt changes, of picturesque light and shade." (*Briefer Course*, p. 171.) Similarly something seems to be lacking in the following statement: "Knowledge is the result of observation, comparison, and classification; all of which result from the relationship of one thing to another." (Carpenter: *Witness to the Influence of Christ*, p. 46.) We might pile fact upon fact, but this would never result in knowledge. Knowledge is of relations, and these do not appear in sensation alone, but only when we reflect upon our experiences. To quote Professor Dewey again: "Thinking transforms perception by bringing out elements latent in it, thereby completing it." (*Psychology*, p. 158.) Thus it appears according to his view, which is essentially my own, that an act of knowledge is not circumscribed by an act of sensation, but that knowledge arises only as a result of reflection, and consists of a conscious relation of known object to perceiving subject.

5 KNOWLEDGE AS A SEARCH FOR THE UNIVERSAL. So prominent was the universal as an essential in the knowing process, that Socrates regarded knowledge as a search for the universal element in experience. Perception is the first stage in the knowledge process, or perhaps it would not be incorrect to say it is the simplest form of knowledge. The second stage, according to Plato, is that represented by a knowledge of the

relations of perceptions to each other, and the third and highest stage of knowledge is represented by our consciousness of the unity of knowledge as a whole. This unity of all knowledge, all reality, all beauty, truth and goodness, was represented in the "Idea of the Good" and true joy comes only to him who can see these broader relations, "The many," according to this view, "are seen but not known, and the ideas are known but not seen." (Cf., Jowett's *Republic*, p. 208.) The lover of knowledge is the only pure in heart, and he alone shall see God. Plato asserts that "No one who has not studied philosophy and who is not entirely pure at the time of his departure is allowed to enter the company of the Gods, but the lover of knowledge only." (*Works*, Vol. II, p. 26.)

6 SCEPTICISM AS THE DENIAL OF THE UNIVERSAL. The history of philosophy shows a considerable number of thinkers, who have held very different views regarding the extent and validity of knowledge from those mentioned in the foregoing section. The Sophists, in so far as they were philosophical at all, were sceptics. They denied the validity of universal knowledge, and reduced all to opinion and perception. Protagoras, chief of the Sophists, said that "Sense perception is the only source and only kind of knowledge." (Cf., Cushman, *History of Phil.*, Vol. I, p. 69.) Again he asserted that "Man is the measure of all things." Gorgias said that nothing could be known, and that if it could be known, it could not be communicated. He did not notice the contradiction in that he asserted by his denial of knowledge, that something can be known, and also communicated.

The long search for the universal element in knowledge before Socrates had not resulted in much gain, and the extreme divergence of philosophies leads to much doubt on the part of the Sophists as to the validity of knowledge. There was no agreement as to the first principle of all reality. It had been asserted to be earth, air, fire, water, a combination of these, and the infinite, by as many different groups of philosophers. The Sophists, seeing the instability of the philosophy of the physical scientists, despaired of ever attaining truth by scientific methods in their disputation. They neglected truth for popular effect. Their scepticism thus grew out of the philosophical agnosticism

of the earlier cosmology and physical speculation. The search of the Miletian school for the first principle had failed; the doctrine of the universal flux asserted by Heraclitus; the denial of the reality of the many by the Eliatic sceptics, the proof of the inadequacy of the sense organs, and the dependence of perception on these, by the physical philosophers, Empedocles, Anaxagoras, and Leucippus; all these causes had marked effect in producing the scepticism of the Sophists.

Men often become misologists, or haters of ideas, after many times finding arguments which they considered sound, proved false. Thus they come to discredit knowledge generally and become sceptics, whereas such experiences should rather point to the necessity of clear thinking, based on universal principles, rather than mere opinion based on what the senses reveal. (Cf. Plato's Works, *The Phædo*, pp. 235-236.) If Protagoras were correct, there would be no common standard of truth or experience, and the only reality would be individual opinion. Each man would be shut up in his own experience. Here we find expression of the doctrine of Solipsism.

Hume gave expression to the sceptical view of knowledge, but in a more refined form. His scepticism was based on his theory of the association of ideas. The only principle of organizing experience was that of association of ideas, and this association is purely empirical or *a posteriori*. This left his world in the same perpetual flux as that of Heraclitus many centuries before. His epistemological doctrine led to his scepticism. Hume saw toward the end of his life that what was needed was a norm or standard of some kind. His scepticism was the refutation of his own empiricism. Kant came to the rescue of this world of Hume by supplying the necessary norm.

The sceptic denies his own position by asserting the validity of knowledge, for as Bradley reminds us, "To say that reality is such that our knowledge cannot reach it, is a claim to know reality; to urge that our knowledge is of a kind which must fail to transcend appearance itself implies that transcendence." (*Appearance and Reality*, p. 2.)

7 KANT TO THE RESCUE OF KNOWLEDGE. Kant says that a world of pure empiricism cannot hold together for it cannot find the necessary principles in any given experience or series

of experiences, which are necessary to unite the separate element of experience. He supplied these in the form of his famous categories as the original and innate forms of the understanding. Thus he brought order out of the chaotic world of Heraclitus and Hume by supplying principles of organization in the form of categories. Understanding must supply these principles, for experience cannot. Kant was a rationalist, not an empiricist, yet he placed decided limitations on knowledge. He held that the categories of the understanding cannot know reality but only phenomenality. Their only purpose was to give form to our sensations and in no sense could they give us the noumena, or ultimate reality of things. If it be true that the only function of the forms or categories is to arrange our sense perceptions, then it is true that they give us phenomena and not reality.

Kant did not remove consciousness from the phenomenal realm nor did he see the contradiction in his theory, which is, namely, that one phenomenal thing cannot know another. There must be a reality in thought that is indisputable, if it be true that it can know phenomenality at all. For to say that one phenomenon can know another, is to assign more than phenomenality to the one,—hence the contradiction.

8 NATURALISM AND POSITIVISM. Kant would thus limit knowledge to an understanding of the world of phenomena of the descriptive sciences. This doctrine gained expression in many ways. It was best expressed in the physical science philosophy of the eighteenth and nineteenth centuries. Spencer held that "In its ultimate essence, nothing can be known;" without seemingly becoming conscious of the fact that this assertion carried with it much more than is justifiable on purely empirical grounds. (Cf. *First Principles*, p. 21.) Macpherson says rightly that "So long as the purely mechanical conception of the universe obtained sway over the minds of philosophers there was no getting beyond positivism, with its theory that nothing can be known beyond co-existences and sequences." (*Spencer and Spencerism*, p. 69.) Another shortcoming of naturalism is seen in the fact that, as H. Sidgwick says, "Naturalistic or positive philosophy does not recognize what ought to be as an object of knowledge, distinct from the

knowledge of the existences and sequences of phenomena." (*Philosophy: Its Scope*, etc., p. 76.) According to the philosophy of naturalism there would be normative science as distinguished from the descriptive science. The world of the ought is not distinguishable from the world of fact. As a theory of knowledge, naturalism does not seem to be altogether complete. It probably goes as far as the theories of Kant and Spencer would allow. A somewhat different theory is expressed in the philosophy of realism.

9 REALISM AS A THEORY OF KNOWLEDGE. Realism is of two kinds, the one holding that we know the external world directly, and the other holding that we know the world only through our ideas, which alone can know directly. The former class are called naïve realists, and the latter hypothetical realists. (Cf. Fullerton, *Intro. to Phil.*, pp. 181-187.) Exponents of naïve realism were Thomas Reid, Sir William Hamilton, and Herbert Spencer, but they were not always consistent in this view. Exponents of hypothetical realism were Descartes and Locke.

It has always been one of the fundamental tenets of realism that ideas and their objects are independent realities, they are in no sense dependent one upon the other. There is a modified form in recent times, going by the name of new realism, that asserts that when an idea knows its object, the idea and its object are one, but in no sense does the reality of the object depend upon its being known. Realists are rationalistic generally, but they do not trust knowledge to the extent that the rational idealist does.

10 PRAGMATISM AS A THEORY OF KNOWLEDGE. Pragmatism offers still another theory of knowledge. Professor Royce defines pragmatism as the philosophical tendency "to characterize and to estimate the process of thought in terms of practical categories, and to criticise knowledge in the light of its bearings on conduct." (*Phil. Rev.*, Vol. XIII, p. 113.) We must keep in mind Professor James's caution that "By 'practical,' pragmatists do not mean the opposite of 'theoretical,' nor do they mean to exclude the latter interests. By 'practical' they mean generally the deductively concrete, the individual

particular and effective, as opposed to the abstract, general and inert." (*Meaning of Truth*, p. 206.)

Pragmatism is primarily a theory of knowledge and only incidentally a theory of reality. I take the following quotation from the *International Journal of Ethics*: "Pragmatism itself, though it was many other things also, was primarily epistemological temporalism. It proposed to define meaning and truth in terms of intertemporal relations between successive phases of experience. Usually they had been defined in terms which either ignored temporal distinctions of before and after, or expressly professed to transcend all such distinction." (Vol. XXI, p. 149.) Professor James, leader of the Pragmatists, says, "One of pragmatism's merits is that it is so purely epistemological. It must assume realities but it prejudices nothing as to their constitution, and the most diverse metaphysics can use it as their function."

We have noted already that the chief task of epistemology is to show how one thing can know another, or how consciousness can know its object. Practically all philosophies are agreed that this is the central problem of epistemology, but the answers they give to the question are different. James says, "It is reality's part to possess its own existence; it is thought's part to get into 'touch' with it by innumerable paths of verification." (*Meaning of Truth*, p. 214.) "Knowing," he says, "is the process that gets us into fruitful relations with reality, whether copying be one of these relations or not." (*Meaning of Truth*, p. 81.) We are reminded that, "knowing is only one way of interacting with reality and adding to its effect." (*Ibid.*, p. 96.)

Pragmatism offers an adaptation theory of truth. Adaptation of the idea to its reality constitutes the truth relation. This point is made clear in the following quotation: "What meaning, indeed, can an idea's truth have save its power of adapting us whether mentally or physically to a reality?" (James, *Meaning of Truth*, p. 238.) Pragmatists do not go so far as to deny the universal in knowledge, but they do restrict its operation to that of bringing us into fruitful and practical relations with the idea's object. Perceptual and conceptual knowledge, or "acquaintance with" a thing, and "knowledge about it" are thus contrasted by James: "Knowl-

edge about a thing is knowledge of its relations. Acquaintance with it is limitation to the bare impression which it makes." (*Briefer Course*, p. 167.) In another place he says: "Conceptual knowledge (or knowledge about) is made such wholly by the existence of things that fall outside the knowing experience itself." (*Meaning of Truth*, p. 114.) Conceptual knowledge thus is limited to the field of verification and practical life, for "Concepts are made for purposes of practice and not for purposes of 'insight.'" (*Pluralistic Universe*, p. 290.)

To get into fruitful and practical relations with the world of reality, our concepts must always succeed in bringing us back to the perceptual world of practical experience. This is clearly James's meaning of truth, for he says: "To gain insight into all that moving life, Bergson is right in turning us away from conception and towards perception." (*Pluralistic Universe*, p. 340.)

Pragmatism is not a test of the concrete, as is often supposed, but a concrete test. Any idea is true if it only fulfills the test of proving successful in adapting us to its object, no matter how abstract the idea may be. My idea of God is true if it succeeds in adjusting my life to my concrete experiences in such a way as to prove of practical benefit to me. This reminds us of the doctrine of the Sophist that the best argument was the one producing the most desirable effect.

II EMPIRICISM AND RATIONALISM. From the foregoing section it is clear that there is considerable difference as to the answer of the epistemological question, What is the extent and validity of knowledge? The Sophists practically denied its validity altogether. The naturalists restricted its range to the descriptive world of science and proclaimed the rest "unknowable." The hypothetical realists broadened the field of reason greatly, but failed to reconcile the dualism between mind and its object.

Those who restrict the proof of the truth of an idea to its empirical test in practical experience are called empiricists. Those who make the test of truth the logical test of the relation of ideas in a system are rationalists. There are other distinctions also, but we need not mention them here. This

distinction is brought out by the following quotation from Prof. Sorley: "While Plato insists on the creative function of mind, Bacon distrusts the mind left to itself, and forbids any anticipation of nature." (*Int. Journal of Ethics*, Vol. IX, p. 156.) Plato was a rationalist, while Bacon was an empiricist. Empiricism is the doctrine that all truth is given in experience and that the method of arriving at it is through observation and verification, and not reflection. It is doubtful whether one can be a consistent empiricist. Locke certainly was not. The truths of *a priori* deductions from fundamental principles are often substantiated by *a posteriori* evidence from the facts of experience and history, but we have no right to suppose on this account, that such truths are only empirically derived from experience.

12 INTUITIONISM AND MYSTICISM. Intuitionism and mysticism have to be reckoned with in any account of the extent of validity of knowledge. Intuitionism is the theory that some things are known immediately and directly without the mediation of the thought processes in the usual logical way, through inference, either induction or deduction. In other words, the process of reasoning is not always necessary as a means of arriving at knowledge or understanding.

When this theory is appropriated in the interest of a search for reality, it is not uncommon to hear it said that knowledge is of no avail in arriving at the true nature of being. The only way to get at true being is to eliminate all differences arising from the thought process, and be swallowed up completely by the ultimate reality itself. There is thus no mediation of knowledge, between fact and reality, part and whole, but is one direct and immediate plunge into the very heart of reality. This is the answer of mysticism to the question of the limits and value of knowledge; another aspect of the doctrine will be mentioned in the next chapter. It must not be inferred from the foregoing that all intuitionists are mystics. There are a great many people not mystics in their philosophy, who hold that some of our truths are arrived at directly or immediately, while others are arrived at through a process of logical inference. It is only when this doctrine is made one-sided and applied to the ontological quest for

reality that the term mysticism is applied to it.

13 IDEALISM AS A THEORY OF KNOWLEDGE. Idealism gives a very different answer to the question of the nature and value of knowledge from those systems mentioned above. For idealism "The nature of intelligence is to seek order, significance, purpose. It cannot be irrational to trust this character of our minds. It would look as if the highest faculty in us answered to the highest fact of the universe. The contrary supposition certainly reduces thought to mockery." (C. F. Dole, *Hope of Immortality*.) It is "knowledge" that "gives us the value of truth." (Münsterberg, *Psychology and Teacher*, p. 56.) Or as Paul Carus says, "The ultimate criterion of philosophy is the intellect." "The Knowing self," says Bowne, "is the primal reality in knowledge, and the only reality of which we have proper consciousness." (*Metaphysics*, p. 331.) "The test of reality is that a thing acts and is acted upon; this is the determining factor in the world of change and effects." (*Ibid*, p. 337.) The intellect in the act of thought produces its own existence. Thought and existence are simultaneous. Intellect is the object of its own thought and it supports the world on real existence, the world of ideas. The phenomenal world is never real existence. Real existence is not out of thought, or in time. Thought not only makes its mental constructs but in the logical arrangement of its concepts it gives them their meaning also. It makes for us our world of meaning, it makes the world intelligible. In the act of knowing some content is not added to the thing known, but rather the act of knowing is a reaction, a representation of a content already in the thing known.

For common sense the world is only a succession of rapidly moving phenomena, but when thought is ushered in the whole situation is changed, and the world is more than a rapid movement of meaningless data. It becomes a world of meaning and purpose, a world that gains significance in proportion as we are able to interpret the hidden meaning of things. The real world, then, is not simply the world of sense, nor is it the carefully arranged world of the natural scientist, rather the real world is the world of purpose and meaning underlying all phenomena and its orderly arrangement, and we are brought

into relation with this world through consciousness.

The causality of common sense finds its explanation in an infinite series of successive events in a time world where each cause becomes in its turn a consequence. According to this view causation must be sought in a first cause and such a search ends in an infinite regress. The difficulty of such a conception arises from a mistaken notion of time which is regarded as a separate reality independent of our experience of it. This view, of course, fails to see the phenomenality of the time process itself, which exists in and for intelligence only. Mechanical causation has its practical value which cannot be denied it, but its value does not lie in its giving any final answer as to nature, but rather in the fact that it describes for us the sequential order of phenomena, which order has its reality in the intelligence that knows it as real. Only volitional or purposive causation can give any final answer as to the real nature of things. Mechanical causation apart from purposive insight is a barren abstraction. The nature of things can only be explained truly in terms of personality.

Idealism thus overcomes the apparent dualism of the universe by showing that such a conception has its basis in unclear thoughts of men. There is no distinction between the world of fact and that of purpose, since both exist in and for consciousness. We thus find here what is "epistemological monism" which, to use professor R. B. Perry's words, "means that when things are known they are identical element for element, with the idea or content of the knowing state." (*Approach to Philosophy*, p. 331.)

According to the idealistic epistemology we have partial truth only on account of our partial knowledge, and "absolute knowledge" answers to "absolute truth." (Plato's Works, *Parmenides*, p. 54.) Knowledge for Plato consists in becoming conscious of the relation of the various ends to the end of all ends, the idea of the good, and this is made possible by the concept of numbers. The good is the idea of all inclusive being; by participation in it alone do other ideas, subordinate ends gain any existence at all. This good, the final and all inclusive aim, is the object of all knowledge, indeed it is knowledge. The idea has its own other which is the idea of the

good, but other than the good there is nothing, non-being.

James criticizes the idealist when he says in effect that "knowing" is not a "static relation out of time," but rather a "function of practical life." (*Meaning and Truth*, p. 120.) There is certainly one sense in which the idealist would agree to this view. It is quite true that knowing has very practical as well as external reference to a temporal and spatial order of things, but he will not accept the view, without better reasons than are so far apparent, that knowing is a "function of practical life," if this is to mean that it is limited to the temporal order of things.

14 SUMMARY. It is time that we summarize briefly the results of this chapter and point out their educational significance. The chief problem of epistemology is that as to the limits and validity of knowledge and this problem is vitally connected with that of the nature of reality, or being. It may be held that the problem of the nature and limits of knowledge should be determined before the search for reality is in order. Some one has said, though I am not able to find who, that "It is useless to endeavor to discover the real significance of the world and being until we discover the nature and limits of knowledge. In differences of psychological theory all differences among philosophers take their rise." This view not only shows the close relation of epistemology and metaphysics (though it reverses the usual order of procedure), but also the relations between psychology and epistemology. Psychology does, however, deal with the nature and extent of knowledge, but only with the description and explanation of this process from a causal point of view.

Socrates asserted that the particular in experience, or that given by perception, is only an incident in the knowing process, and that the universal, or the concept, formed the real basis of knowledge and inference. He did not, however, give this concept separate existence as did Plato after him. The sophists denied the validity of the universal altogether and claimed each man to be measure of his own being. The naturalists and positivists accepted the validity of the universal, but only so far as it could be verified in experience. The pragmatist is also afraid to trust knowledge outside of his sight and so keeps

a close rein on it, or in other words, limits the truthfulness of an idea to its power of adapting us in a fruitful way to reality.

Mysticism is a form of ontological intuitionism which asserts that being cannot really be known at all, and is realized only by a denial of all knowledge and the distinctions which it makes. Idealism goes much farther than empiricism in asserting the validity of knowledge, and makes knowing the creative function of the world of reality, or identifies knowing and being, and thus eliminates the dualism between mind and matter, or more generally between the knower and the known, and thus brings together again through intelligence the world of fact and purpose, which distinction was made in answer to the practical demands of our will.

15 EDUCATIONAL IMPLICATIONS OF EPISTEMOLOGY. And what is the significance of all this for education? The significance of these points of view for education lies in the fact that they do as a logical consequence modify our educational theory since they modify our view of the world as a whole, and so our practice also.

The sophists' denial of the validity of knowledge would result in a theory of education that would fail to make room for any training of knowledge. It would result, as their own practice showed, in teaching the exercise of free and unclarified individual opinion for each man is his own measure both of being and knowing. For the Socratic school of philosophy the highest aim of education was virtue, which was synonymous with knowledge. The only vice is ignorance, the only virtue knowledge, and knowledge consisted, as we have above noted, in a search for the universal element of experience, as against the particular of sense perception. Such knowledge had its foundation in principles universally admitted by all men. Teaching consisted in consciously bringing to light such principles, and this was the highest duty of man, the call of virtue itself. "Know thyself" is first in every man's life. Not sense-perception, but judgment and reasoning with universals or concepts, form the basis of such education as logically grows out of the Socratic philosophy.

For all forms of naturalism and positivism, the chief busi-

ness of education would logically be that of training the senses and perception, for by these epistemological theories knowledge is limited to perceptions and their relations to one another, to the field of actual experience. The science would offer the best means for a training of this sort. Hence, when Spencer asked the question, "What knowledge is of most worth?" he gave a logical answer when he said, "Science." Nothing could be known outside the field of science, so why bother about the "unknowable?" But one might well ask of the positivist, when so much time is given to the external things, how is it possible to give sufficient attention to mind which alone is capable of dealing intelligently with things?

For realism both the world of ideas and matter are equally and independently real, and both sides of experience deserve equal attention as a natural consequence. No partiality is here shown for the physical science, as in the case of naturalism or for the abstract sciences, as with Socrates and Plato.

Pragmatism, as a pedagogical theory, holds that "We ought to subordinate our abstract and theoretical to our concrete and practical interests, and that, in particular, our educational curriculum should be made to conform more than at present to the personal needs and future vocations of our students." (Montague, *Journal of Philosophy*, Vol. VI, p. 463, footnote.) Such an educational theory follows logically from the epistemological theory of pragmatism that the test of the truth of all conceptions and propositions is "verification through sense perception." In this sense it is much like naturalism, but indeed is in other ways more generous. It would not rule out religion since such concepts are "valuable," if they aid in adapting us to the practical demands of life.

Mysticism denies entirely the value of knowledge, yet it would teach its doctrine by trying to enlighten us about the nature of reality. Mysticism is a theory of being rather than a theory of knowledge, and so has but little to offer to education from the latter angle. Indeed it is very doubtful if mysticism offers any more help from the ontological side. Professor Fite says: "It is rather difficult to deal with mysticism on logical grounds; for the mystic has renounced logic. All that we can do is to follow his directions for the quest of reality and ask ourselves where we are coming out. Pro-

fessor Royce had applied this method to the mystical conception of being and finds that the result is nothing. A distinctionless being is simply no being whatever." (*Individualism*, p. 197.)

Idealism regards the world as a conscious reality. Absolute will or purpose is the ultimate reality, and this can be known only by reflection. No amount of observation, experiment and verification will ever reveal the world of purpose, yet all will aid greatly in adjusting us to the practical demands of life, and are indispensable to an understanding of the time and space order of the world. Only reflection and interpretation of facts thus revealed will ever disclose the world of meaning, value, and reality. While the idealist gives due credit to the world of the physical sciences, he never forgets that the facts and laws revealed through this mechanical order of things all have to be worked over by conscious reflection to determine their significance for the whole. It is partly through such interpretation of the fact order that the individual self discloses its deeper relations to the world of purpose and value. Other implications of idealism for educational theory will be discussed in Part V.

Plato unfortunately separated his world of fact, the temporal order, and the world of reality, or ideas. Since the ideas are our only source of communication with the divine reality, the good, he highly discredited the world of material, and so would make no place for physical science in his theory of education. The best way to get in relation with the real world was by abstraction from experience. It was for this reason that Plato preferred the abstract science of mathematics. Here he showed the influence of Pythagoras. For the same reason he denied all passion music and poetry. He curbed feeling and emotion through reflection and abstraction. He denounced the products of imagination as unreal, and belonging to the world of appearance and opinion, only reason and judgment partaking of the real.

In this and the foregoing chapter we have tried to make clear the fact that no educational theory can be understood in its true setting unless it is seen in the light of the whole view of life. We have shown briefly what several different systems of metaphysics and epistemology imply as bases of

educational theories and consequently how they modify practice. We shall continue to show the intimate relations of philosophy and educational theory by observing the latter from the points of view of logic, philosophy of religion, æsthetics and ethics.

CHAPTER IV

THE LOGICAL ASPECTS OF EDUCATIONAL THEORY

I DEFINITION AND MEANING OF LOGIC. Logic is the science of truth. It deals with the relations of ideas and their objects. It is concerned with the establishment of the truth relation between facts and idea. Practically all philosophers are agreed that truth depends upon the relation of an idea to its object, but the nature of this agreement is a matter about which there is yet much difference of opinion. Some contend that truth is established when our ideas bring us into fruitful relations with our world of practical experiences, while others hold that the truth of an idea consists in its relation to the larger system of purposes, and that it is of the very nature of the truth relation to be consistent throughout.

Logic is concerned with what constitutes evidence or proof for the truth about a certain relation asserted in the form of a proposition. We make a great many assertions about the facts of the world in which we live, but it is quite another matter to be certain that these assertions do not outstrip the evidence. Huxley said that the assertion that goes beyond the evidence is a blunder and a crime. Kant meant the same thing when he said that "it is not augmentation, but deformation of the sciences, if we effect their limits." (Quoted by Münsterberg, *Psy. and Life*, p. 178.) Thus we see that what constitutes sufficient evidence is a question of logic. We are constantly asserting the truth of relations about objects or ideas which are not contained in these particulars and there should be some way of checking up to see whether we go too far in such assertions of relationship. We constantly are making inference from one thing or fragment of our experience to another. We affirm or deny something at almost every breath. What is the ground of this inference? How can truth be affirmed on the grounds of inference?

Logic then is concerned with the establishment of the truth relations between an idea and its object, and this by laying down the process of correct inference and what constitutes sufficient grounds or evidence for the assertion or denial of certain relations.

2 THE DATA OF LOGIC. We see from the foregoing that logic is not a thing foreign to our experience, but is the very ground of our understanding, our experience. Logic is not concerned with the facts of our experience as isolated parts, but with their relations one to another in a systematized whole. For the logician nothing stands alone, all is connected or related in a large organization of parts. Indeed the only meaning the part has, is for the larger system of things of which it is a part. We are not, then, in the field that has nothing to do without experience when we are studying the abstract relations that a system of logic involves.

3 LOGIC AND COMMON SENSE. Logic has a certain relation to our common sense experience. It goes considerably beyond common sense, but it certainly deals with the same experiences, although in a more thorough and rational manner. The man of common sense is obliged to make his inferences from particular to general, and to assert or deny truths about certain relationships. We have seen already that the logician is engaged in the same kind of business. One of the great tasks of our life is to reach beyond the particular that is contained in the present experience to a larger unit of experience. Common sense makes this inference on the ground of pure supposition and does not go into the more fundamental questions of relationship. The man of common sense is too apt to mistrust the logician. He does not understand his procedure and consequently considers his formulæ as barren abstraction, totally unrelated to the world of actual experience. I think Stevenson has very well put the common man's mistrust of the logical procedure. I quote from an *Inland Voyage*. "On the other hand, it is not at all a strong thing to put one's reliance upon logic; and our own logic particularly, for it is generally wrong. We never know where we are to end if once we begin following words of doctors. There is an upright stock

in a man's own heart, that is trustier than any syllogism; and the eyes, and the sympathies and appetites, know a thing or two that have never yet been stated in controversy." The logician is more systematic in his inference and requires a certain amount of rational basis before he is willing to rest certain of the conclusions to which his inference has brought him.

4 LOGIC AND THE DESCRIPTIVE SCIENCES. It would be well at this point to restate the relationship between logic and the descriptive science we have already discovered in Part I of this volume. The scientists have made great progress in modern times because of the scientific accuracy of the method of procedure. This is only another way of stating that science is logical in its methods. Logic has to do with all grounds of inference whether inference is of the type expressed in common sense, or by the man of science. The data of science must be grouped in such a way as to show their connection, otherwise there would be no meaning. The methods of classification and grouping of phenomena employed by the scientists represent the practical application of the principle of logic. The sciences are logically interdependent for the very reason that the phenomena with which they deal are interdependent.

The principles of logic are universal and in no sense is their application restricted to particular incidents, not to the prejudices of common sense. The distinct mark of the true scientist is that he strive constantly for the elimination of self in his judgment and provide conclusions which are in no sense restricted to the particular judgment of the individual expressing them.

There is grave danger to-day lest the world of mechanical science be taken as the world of final reality. The logician establishes the principles upon which inference is made from such a world to a world of ultimate reality, just as he lays down the principles for drawing conclusions and inferences on the basis of particular facts. The mechanical world of the time and space has its existence as we have already noted only in the ideas which think it. This mechanical world of science is therefore not a world independent of our will, but rather it has been constructed out of the practical demands of this

will. There is grave danger that we forget this matter when we become fully absorbed in our science. Note what Professor Horne says: "The view of the universe as a mechanism, is made possible to modern minds through Newton's law of universal attraction, is a construction of man's own intelligence to satisfy his own purpose in understanding the universal motion." (*Idealism in Education*, p. 173.) Macpherson in his *Spencer and Spencerism* argues much in the same way. He says: "There is something more in the world of experience than a mere succession of sense data. Some experiences set the mind to working on its own account and cause it to deliver itself of the truths which are not contained in any of our actual experiences or in all of them together, but which extend over a wider ground than experience possibly can cover." We see from the suggestion that the world of reality is not contained in the sense data of our experience. There must be a passage from this to a larger system of reality, that is to say inference from these data is made necessary as a result of our demand for the relationship between the particular and the universal, or the part of the whole. Experience is always in part, but this part is significant and real in the sense that without it the whole could not exist. The parts are necessary to the conception of the whole, and the whole exists only as a relationship of parts. Professor Bowne says: "When we turn the contents of the infinite consciousness into a kind of eternal and necessary logical mechanism we simply fall back to the lower mechanical categories which thought alone makes possible, and subject thought to its own implications and products. Such a view begins in confusion and ends in self-destruction."

The methods of analysis and synthesis employed by the scientists are logical methods of procedure. They are the best recognized methods of inferring the universal from the particular, or the whole from the part. Induction and deduction refer to the same general process of reasoning or inference. In the inductive method we proceed from the parts to the whole. In so far as the scientist or the man of common sense employs these methods of inference he is logical. The case is not different when we select a particular field of our experience such as that of education. We shall see more of this particular

application in the last section of this chapter.

5 LOGIC AND PSYCHOLOGY. There has often been considerable confusion as to the relation of logic and psychology. Psychology is generally defined as the science of the states of consciousness. Logic may be defined as the science of correct thinking, or the science which defines the necessary principles upon which all inference is based. Now there seems to be an overlapping in the two cases. In so far as psychology and logic are dealing with the mind, they have a common field, but their questions concerning consciousness are very different. Psychology merely asks, how the mind works, and why does it happen to work this way? Logic on the other hand, shows us how the mind works when we think correctly, and shows what is necessary before we can assert or deny anything with respect to the mind, or the world. Logic is concerned with the relation between ideas and their connection in a larger system of reality. Psychology does not consider the question as to whether the ideas are real or not. It never raises any question as to reality at all, either as to its own existence, or that of the world generally. This much it takes for granted, leaving logic and metaphysics to show the truth of such a supposition and its relation to a larger system of things. Thus we see that there is no necessary conflict between logic and psychology, although they do have some common ground.

6 LOGIC AND METAPHYSICS. There are certain relations between logic and metaphysics that should be spoken of here, if we are to arrive at a complete view of the field of logic. We have found some common ground between common sense, logic, and metaphysics. The relationship is best defined as one of interdependence or mutual dependence. Logic is concerned with the truth relation of an idea and its object. It never asks the question as to whether either the idea or the object is real. It takes this much for granted. Metaphysics is the branch of inquiry that is concerned with the reality of the world, and all questions as to the reality of ideas or of the object of our ideas must be referred to metaphysics for their answer. Logic is concerned simply with the relationship of ideas and objects in a larger system. It raises the question

as to how we can pass from the individual to the universal, or from the particular to the general. It does not ask whether either the particular or the general has any ultimate or final reality. I think that this point can be made somewhat clearer by quoting from Prof. Aikins. He says: "Metaphysics . . . inquires into the most fundamental and general relations of all things, and tries to find out what the inmost nature of anything must be in order that all of these relations should belong to it together. Logic like metaphysics has a very general aim; it too inquires into the most fundamental relations of things and the way in which one involves another. But its inquiry is not so profound as that of metaphysics; it does not ask what the inmost nature of things must be in order that these relations should exist together in them; and the knowledge that it does try to gain about relations and their mutual implications it regards as a means, not as an end. . . . Thus so far as logic tries to make us reason correctly by giving us correct conception of things and the way in which their relations involve each other, it is a kind of simple metaphysics studied for a practical end." (*Principles of Logic*, pp. 6-7.)

7 LOGIC AND EPISTEMOLOGY. There are also close relations between logic and epistemology, which if stated here will aid somewhat in marking out the special field of logic. We have defined already epistemology as the inquiry into the question, What can be known? This shows us at once the close relation between logic and epistemology. Since we have already asserted that logic is concerned with the principles of inference, and it is through inference that knowledge is made possible, logic and epistemology, therefore, cannot be separated, but rather there is a mutual dependence here, such as we have noted between logic and the other fields of inquiry. These different sciences and philosophical disciplines are simply different fields of knowledge made possible by different attitudes, or points of view with respect to the world. The world of the descriptive scientist is concerned with relations the same as the logician, but here the relationships involved have an objective reference to phenomena which are grouped and classified according to certain general principles of identity and differ-

ence. It is the business of logic to inquire more fundamentally into the nature of such agreement and difference. It is left for metaphysics to state whether such relationships have any meaning for the world as a whole, that is, whether they in any sense condition or reveal reality. Epistemology is concerned with the nature or extent of knowledge. What would reality be if we did not know it? And then the question of knowledge raises the question, how can we proceed from the particular to the general, and this inquiry has grown so fundamental that it has been set aside as a particular department of study called logic. The relations of the descriptive sciences are with reference to the temporal world of fact. The real world is a logical world, a world where facts exist only in their relation to a larger whole. This is the world in which reality must be found if found at all. I quote from Prof. Bowne to make this point a little clearer. He says: "In fact, as our studies in epistemology have taught us, in the temporal world of psychology nothing abides. It is only in the ideal world of logic that anything abiding can be found. It is not the sensations, then, as mental events which abide, but rather and only the constant meaning which they express, or of which they are the bearers. This meaning, however, is a purely logical and ideal function, and instead of constructing thought it is its product." (*Metaphysics*, p. 385.)

8 SYSTEMS OF LOGIC. Enough has been said already to suggest that logic and metaphysics are so closely related that our views as to the reality of the world necessarily affects somewhat our logic, or our conceptions as to the relations of the part and the whole. Logic may be a common ground on which many metaphysical conflicts are fought and settled. It is just as true, however, to say that every system of metaphysics involves certain differences in logic. If this be true then there are perhaps as many different systems of logic as there are systems of metaphysics, and in as much as our view of reality is the most fundamental of all of our views, it perhaps follows as a necessary consequent that as our metaphysics differ so do our logics also.

9 GENERAL METHODS OF LOGIC. Perhaps the two most

widely contrasted methods of logic are those of empiricism and rationalism. Empiricism is the logical view which maintains that the only possibility of arriving at truth is through the method of induction, leading to general conclusions or propositions through the particulars of our experience, and which conclusions or propositions can be verified and thus supported by referring them to the facts whence they came. This is the method of induction pushed probably to its extreme. Rationalism contends that this process of inductive inference is not an end in itself, but leads us to the conclusions which, though based upon an experience, cannot be denied always or disproved by reference to such experience. That is, we are able to pass beyond the particulars of experience to such a degree that we are not forced to return to them for the verification and proof of the proposition asserted regarding these particular relations. The proof of such propositions rests in the relations of the facts thus asserted to a larger system of things, which system is not contained in experience. Thus we see that the primary difference between empiricism and rationalism is a difference in the extent to which the two groups of philosophers would trust knowledge. Empiricism depends more on the common sense method of verification, or proof by reference to sense-perception or by apperception. Rationalism on the other hand has grown very distrustful of the evidences of our senses, and is not willing to leave the verdict in the hands of sense experience. There is a certain rationality about the mind, and a certain connectedness in our experience which enable us to pass beyond that involved in each single experience, to its relation to the other parts in a larger whole or system of things, and the only way we can test the truth from such a point of view is to refer the truth asserted in one proposition to a larger system of truths.

Empiricism is concerned more with the *a posteriori* method, while rationalism is quite as much concerned with *a priori* forms of knowledge. The former set of evidences is based on common sense experience and perception, while the latter is concerned with the original forms of the understanding as well. B. Russell says: "All *a priori* knowledge deals exclusively with the relations of universals." (*Prob. of Phil.*, p. 162.) This statement is correct, provided we do not deny the rational

method of *a priori* deduction the right to use the principles of inductive inference of the *a posteriori* evidences of our experience.

Professor H. Sidgwick warns us that if we are to be protected against misleading inferences, we must be very careful to see that the premises which we accept as our starting point are self-evident. (*Methods of Ethics*, p. 239.) It is also well that we remind ourselves that these premises must not only be self-evident to a superficial observation, but they must survive the test of reflection as well. Mere self-evidence is not a sufficient test of the validity of the premises from which we draw conclusions. Professor Sidgwick suggests this thought in his statement that the "Propositions accepted as self-evident must be mutually consistent." (*Ibid.*, p. 341.) In concluding this section I desire to quote from Bosanquet, who states the matter precisely as to the nature of inference. He says: "Inference cannot possibly take place except through the medium of an identity or universal which acts as a bridge from one case of relation to another. If each particular were shut up within itself as in the letters taken as an instance just now, you could never get from one which is given to another which is not given, or to a connection not given between two which are given." (Bosanquet, *The Essentials of Logic*, p. 139.)

IO THE PROBLEMS OF LOGIC. In what has been said already we have suggested the problems of logic. They should be restated here, however, in order that a better view of the field of logic as a whole may be obtained. The relation of the universal to the particular has been a problem for the philosopher almost from the beginning of philosophy. From a clear understanding as to the relation of universal and the particular, we get a clearer view of the relation between induction and deduction. There is no essential opposition between the universal and the particular. Knowledge is possible only because we have general notions or ideas, which are not restricted to the particular incidents of our experience. There are certain common elements of our experiences that enable us to pass by inference from the particular to the universal. With the empiricist the emphasis is on the particular, while the rationalist emphasizes the universal. Professor James makes a plea

for particulars when he says: "Why from Socrates downwards, philosophers should have vied with each other in scorn of the knowledge of the particular, and in adoration of that of the general, is hard to understand, seeing that the more adorable knowledge ought to be that of the more adorable things, and that the things of worth are all concretes and singulars. The only value of universal characters is that they help us, by reasoning, to know the truths about individual things." (James, *Briefer Course*, p. 242.) It would seem from this statement that there is a partiality shown in favor of the particular, but just what the logical reasons for such preference are, is a little difficult to see. It seems to me that Professor Hyde states the thing a little better when he says: "The universal is not opposed to the particular. They are not mutually exclusive. Neither can exist apart from the other. The particular has its existence in the universal, and the universal has its expression through the particular." (*Practical Idealism*, p. 317.) The one and the many raise the same problem as the universal and the particular. It is the same problem expressed, however, in broader terms. We have discussed this matter sufficiently in its relation to metaphysics in a previous chapter.

Cause and effect are problems for the logician. Just what is meant when we say that one thing is a cause and another the effect? Cause from the scientific point of view means that a certain change or modification in one phenomenon produces an effect which is noticeable in another. The whole series of antecedents and consequents is found in a world of time and space. Such causes do not act outside time. Time includes them. The metaphysician, as we have noted, inquires as to whether or not this is what is meant by final cause. The idealist answers the question by asserting that it is the nature and essence of intelligence or purpose to give the final explanation of all phenomena. The logician must show how such a judgment is based on scientific and accurate logical principles of inference, inductive and deductive.

The finite and the infinite are the problems of the one and the many, the part and the whole, raised in a new form. We need not discuss this matter further here, since considerable space has been given to it already. Nominalism and conceptualism are problems which have long confronted the logician.

Does the universal term which asserts certain identity between particulars, have any separate existence apart from the phenomena whose identical elements it suggests? With Socrates, the universal was not claimed to have separate existence. The concept was not a part of reality, but only that universal element of identity which was necessary to knowledge. Most philosophers have accepted the view of Socrates that the universal is essential to knowledge, but they do not stop with him here. They go on to assert that it is of the nature of the universal to have its essential relation to a larger system of ideas and purposes, and that the concept gets its meaning the same as the particular by reference to the larger system of ideas and purposes, and by reference to the larger whole of which it is a part.

11 THE LOGIC OF MYSTICISM. It was suggested above that the different systems of metaphysics form the basis for different ways of viewing the world as a logical mechanism. It would be well for us to bring together in this section certain fundamental views with regard to the world conceived as logically organized. Mysticism as a concept of reality or being, has no place for logic. The mystic has abandoned logic altogether. He finds the only reality in the immediate experience, and denies altogether the value of knowledge as a means of mediating between the individual experience and reality as a whole. The mystic not only denies logic but makes it very hard for the logician to criticise his system at all. The whole of reality consists in the immediacy in which the mystic finds himself.

12 THE LOGIC OF PRAGMATISM. The logic of pragmatism also is concerned extensively with the immediate particulars of experience, and as we have seen the particular method employed by this system of logic is that of verification. We have no grounds of asserting the truth of the proposition except that of the fruitful and practical relationship with which our ideas bring us in our experiences. The truth of an idea depends upon how it worked, and not on its relation to the system of the whole. Perhaps these two philosophies afford a sufficient background for raising certain important distinctions between

the logic of idealism and that of the other philosophies.

13 THE LOGIC OF IDEALISM. The idealist often has been classed with the rationalists of whom we spoke above. The test of pragmatism is verification, while for idealism the only ultimate test of truth is the consistency of this truth with all others. Consistency rather than verification through sense perception is the chief method of idealism. According to the idealist we make the world in which we live. Our experiences must constantly be reshaped in order to assume the form of consistency which is demanded by our logical will. Professor Münsterberg says that "Human knowledge has to remove and reshape the material experience until it forms itself in scientific theories in such a way that a world of order and law is constructed. Our own truth-seeking will thus determine beforehand what forms of thought must mold experience in order to give it the value of truth. Our own reason thus lays down beforehand the real constitution of the only possible world which can be an object of knowledge." (*American Problems*, p. 147.)

This view is quite consistent with that expressed by Hyde when he asserts that "Pessimism is the only consistent and logical attitude for any man to take who conceives the world he lives in as a mere aggregate of facts; the mere presentation in time and space of objects and events."

Professor Bosanquet asserts the same truth when he says that "It may be that consciousness is capable of continuing a world, not as a copy of a ready-made original, but as something which it makes for itself by a necessary process, and which refers beyond this finite and momentary consciousness." (*Essen. of Logic*, p. 11.)

The idealist does not believe that it is possible to express the whole truth in a single proposition, nor advance so far in our knowledge that there is no truth outside its borders, so far as we finite beings are concerned. There is no truth outside knowledge, although there may be truth outside what we know. The test of our knowledge is always its consistency with the view of the whole and the whole is never given in the part. Professor Welton says: "It appears, then, that consistency with all other knowledge is the test of truth, and it

follows that, as knowledge is always advancing, it is often impossible to say with absolute assurance that any particular item of our interpretation of the world is true. Further knowledge may, in many cases, necessitate a revision of such interpretation in the future as in the past." (*The Logical Bases of Education*, p. 22.)

Our knowledge is always asserted in the form of a judgment. The proposition asserts this judgment in the affirmation or denial of a certain relationship that obtained between facts or ideas. Every judgment is the connection of parts in a whole, and it is this whole which characterizes reality. For it is the very essence of reality to be self-contained and to require no other to explain itself. Professor Bosanquet says: "Judgment is always the analysis and synthesis of elements in some one thing, or ideal content." (*Essentials of Logic*, p. 106.)

Perhaps I could not state in a better way the idealistic theory of the nature of a judgment than to quote from Professor Bosanquet again: "Knowledge is always judgment. Judgment is constructive, for us of the real world. Constructing the real world means interpreting or amplifying our present perception by what we are obliged to think, which we take as all belonging to a single system one with itself, and with what constrains us in sense perception, and objective in the sense that its parts act on each other independently of our individual apprehension, and that we are obliged to think them thus." (*The Essentials of Logic*, p. 58.)

14 SUMMARY. We shall briefly summarize now the conclusion of this chapter. Logic deals with the data of human experience. It will be remembered that in Part II of this volume we said that it was the aim of philosophy generally to determine the meaning and value of our human experiences. We are now in a position to see more clearly that no such meaning or value is obtainable, except in so far as we see the individual facts of our experience in their relation to the whole, and that it is the business of logic to point out this relationship, and to show the logical ground of inference, or what is necessary in providing the truth of a certain relationship. In this matter, logic is like the descriptive sciences, for

they must proceed on similarly rational grounds of inference. Logic differs from psychology in that we go beyond the mere question of how the mind worked, or the laws that govern it, as phenomena in sequence. Logic asks the question how can we proceed from what is known and given in experience, to what is not known by the method of inference? It is just here that we note a distinction between logic and epistemology. Logic assumes that knowledge is possible and proceeds to show the laws upon which correct thinking must be developed. Logic thus not only presupposes the possibility of knowledge, but that reality exists also. It is the business of metaphysics and epistemology to inquire into the grounds of such presupposition.

Methods of logic broadly defined are those of empiricism and rationalism. Empiricism is less confident of the validity of knowledge when it goes beyond the facts of our experience. It always reserves the right to test the truth of the proposition by reference to the particular facts. Rationalism makes consistency the test of truth. The world in which we live is a unit or systematization of parts, each one having a certain meaning for the whole, but no meaning at all in and of itself.

15 THE EDUCATIONAL IMPLICATIONS OF LOGIC. It has become apparent already, from the foregoing, what some of the educational implications of logic are. We shall proceed in this section to point out some of these relations more closely. We have noted that the logician is sceptical of all uncritical thinking, and reserves the right to criticize our judgments on the basis of their relations, not only to fact but to a larger system of reality. We are much in need these days of more critical thinking. Probably there is no greater reason for the confusion in modern pedagogy, than the fact that we have not reflected to any great extent on our experience. This is perhaps as noticeable in the field of our educational experience as in any other field. The demands made upon the schools are often irrational, and the pressure of circumstances such that those in authority yield without careful consideration of the principles underlying their action. Again, we often find in education those whose habits of mind are not particularly reflective and rational and consequently do not give very serious

attention to the problems in this field. The questions are answered on the basis of common sense or intuition and little rational reflection is in evidence. We must here remind ourselves of the often repeated thought in the earlier part of this volume, that the only way of bringing out the deeper meaning or relation of our experience is through critical reflection, involving both analysis and synthesis. Professor Dewey says that "The essence of critical thinking is suspended judgment; and the essence of this suspense is inquiry to determine the nature of the problem before proceeding to attempt its solution. This, more than any other thing, transforms mere inference into tested inference, suggested conclusions into proof." (*How We Think*, p. 74.)

The second point I wish to emphasize as an educational implication of logic, is that the facts which we teach must not be isolated and set off against each other, but rather they must have a distinct relationship one to the other. Without such relationship there can be no real meaning, for facts cannot have meaning in themselves, but only as they are related one to another. There must always be a "fusing principle," as Dr. J. H. Stoutemyer says, to weld the ideas together. The materials of instruction, then, must be of such a character, and so related, that the student may see their unity and connection. Indeed he must be taught to reflect upon his experience, in order that he may bring to light this deeper meaning. Consistency is here made a practical test of the truth of that which we teach. Professor Dewey makes a remark in this connection that is so significant that I quote it here at some length. "Another way of stating the same principle is that material furnished by communication must be such as to enter into some existing system or organization of experience. All students of psychology are familiar with the principle of apperception—that we assimilate new material with what we have digested and retained from prior school lessons instead of linking it to what the pupil has acquired in his out-of-school experience. The teacher says, 'Do you not remember what we learned from the book last week?' instead of saying, 'Do you not recall such and such a thing that you have seen or heard?' As a result, there are built up detached and independent systems of school knowledge that inertly overlay the ordinary systems of experience instead of reacting to

enlarge and refine them. Pupils are taught to live in two separate worlds, one the world of out-of-school experience, the other the world of books and lessons."

It generally results, I believe, from the teaching commonly in practice that students get a certain number of disorganized facts that result in but very little meaning of them. We are constantly being reminded by critics that our schools do not develop critical thinking, and this is because students are not taught to search for the broader and deeper connections of the facts of their experience. This totally neglects the principles of logic which Welton so well states in the following quotation. "Mere fact which cannot be brought into any system is meaningless to us; and the greater the number of systems a fact can be placed in the more it means to us. Incidentally it may be pointed out here that the aim of teaching is not to impart facts but to develop systems; facts are only of value in so far as they are starting points for such development." (*The Logical Bases of Education*, p. 118.)

The ordinary method of cramming, therefore, does not accomplish the purpose of true education, if by true education we mean the power to grapple with the fundamental problems of life, and to discover through our experience their meaning and unity for reality as a whole. The school is too liable to become one factor of the child's life, though often a very incidental one, while his experiences outside of school are grouped into quite a different system. This makes an artificial distinction between school and out of school life, which is not altogether conducive to a thorough understanding of the problems of life.

According to the view here expressed cramming is a sin against all principles of true logic. I quote a significant passage from Professor Dewey in regard to cramming. "For teacher or book to cram pupils with facts which, with little more trouble, they could discover by direct inquiry is to violate their intellectual integrity by cultivating mental servility. This does not mean that the material supplied through communication of others should be meager or scanty. With the utmost range of the sense, the world, of nature and history stretches out almost infinitely beyond. But the fields within direct observation if feasible should be carefully chosen and sacredly protected." (*How We Think*, p. 198.)

CHAPTER V

EDUCATIONAL IMPLICATIONS OF THE PHILOSOPHY OF RELIGION

I THE DEFINITION OF THE PHILOSOPHY OF RELIGION. We may view our religious life and nature from the point of view of the philosopher, just the same as we may view any other aspect of our life from this point of view. The philosopher raises certain fundamental questions as to our religious life that cannot be pushed aside lightly. They go to the very foundation of our belief and actions. The grounds of religion lie in certain fundamental beliefs, which are not to be accepted without question or qualification, but are to be regarded as sound only when they have been considered thoroughly in the light of the whole of knowledge and reality.

There is no more reason why we should accept our religious notions unquestioned than that we should leave the rest of our life and experience to common sense. All the larger questions of life must be viewed from the angle of philosophy, if we are to get the most satisfactory and complete answer which our experience affords.

Philosophy does not take the place of religion, any more than a theory of morals takes the place of practical morality, or than geometry takes the place of carpentry, or the laws of hygiene the place of rest and recreation. The philosophy of religion shows us how religion looks from the point of view of the intellect. From this angle we see religion in its relation to the other interests of mankind, we see their systematic unity and organization. We also see from this angle the nature, meaning, and values of religion in life.

The philosophy of religion is concerned with the problems of God, immortality, and the soul. What is man's relation to God in this life? Has man the qualities of eternal about him; is he immortal? What duties does man owe to God? These are questions for the philosophy of religion. It will be seen

readily that such questions cannot be answered wholly apart from metaphysics and epistemology. All definitions of religion are an attempt to give intellectual expression to this set of values of our experience. These definitions must be subjected to the test of reality, truth, beauty, and goodness. In other words, all values must fit into a logical system which involves no contradiction, for this is the ultimate test of all truth. The philosopher must not be partial to any set of values except as these point to a more complete system of value than any other. He must assign values to our experience on the basis of this standard or scale, and not on the individual standard of his own narrower personal interests. All definitions and conceptions of religion must harmonize with the larger view of life as a whole. In this connection it will be instructive and interesting to note several statements as to what religion is. Dr. Shepard says that "Religion is the way man shows to himself and his fellows, by his thinking, feeling, and conduct, what is his conception of God." Professor Carpenter says: "Religion is the effort to establish relationship with the unseen world." (*Witness to the Influence of Christ*, p. 51.) Professor Emerton in his *Unitarian Thought* says: "By religion the Unitarian means a recognized dependence of man upon the power greater than himself which he feels at the heart of things, animating, guiding, reconciling all by the action of a will that is neither above law nor subject to it, but is itself Law." To this he adds, "the element of personal service." (Pp. 9-10.) Professor Bowne holds that "Religion in its essence is righteousness and good-will toward men and reverent humility and obedience toward God."

All these definitions are an attempt to express the essence and underlying meaning of our religious experience.

2 PHILOSOPHY OF RELIGION AND COMMON SENSE. There are two attitudes we may take towards the religious life. We may take all on faith and belief, or we may attempt to go the limit of our understanding in this field of experience, and leave the faith and belief all that is not open to direct evidence and proof, or that cannot be put into a logical scheme of things. The former point of view is that of common sense, the latter that of the scientist and philosopher. Common sense never

goes the full length of dependence upon thought and reflection. It sees as through a glass darkly. The characteristic of common sense is its unreflective and uncritical attitude towards the world and our experience. Philosophy on the contrary is rational and critical. It subjects all our experience to a searching test of rationality. What is must be consistent with itself and with the whole of life. The mere appearance is no satisfactory test of being or reality. Applied to our religious experience this means that common sense is satisfied to rest all on faith and belief, and makes no effort to clear up conflicting difficulties or absurd hypotheses. It is enough for common sense to hold to its faith, let alone to question the foundations of its beliefs and its faith.

3 PHILOSOPHY OF RELIGION AND SCIENCE. Science is highly refined thinking with the purpose of finding a causal explanation and description of our experience. There is a scientific aspect to every realm of our experience, just because it is possible for us to arrange and classify and explain the phenomena in every phase of our experience. This is as true of religion as of any field. There is a science of religion possible, whether it has been developed yet or not, for we can arrange, classify, and explain the facts and phenomena of our religious life. But as we have seen many times before in this volume, science only describes and explains and does not concern itself with values of life, for to do so it would be partial and it is of the very essence of science that it render an impartial account of the world of our experience as a whole, and of its every part.

Philosophy, as we have seen, attempts to find out the meaning and values of the experience of our religious life. A pure science of religion would leave it barren of all values, purposes, and ideals. A philosophy of religion would seek to find the values of such experience. The science of religion would be concerned with an elaboration of the principles of our religious life regardless of whether such a life had any value or worth, or not. Philosophy of religion seeks to know the values of religious life in their meaning for life and the universe as a whole.

Science cannot argue for the existence or non-existence of

God, or for immortality, or the existence of an eternal soul, for these are beyond the realm of existent fact as evidenced by our world of actual experience. No man hath yet seen God. Science will never enable us to see God, unless God be the mechanical law of the universe of experience. God can be seen only as mechanical and non-personal by science, for science gives us only a mechanical construction of the universe, a causal or sequential series of phenomena. Science raises us to a plane of clearer thinking on every problem of life than does common sense, but certainly science will always fall short of attributing values to our experience and in this matter common sense sees in life greater significance of meaning and purpose than does science. Science may develop new conceptions that will correct old errors of thought about religion and its object, but it will not succeed successfully in denying the existence or reality of God, or His nature, for such questions take us beyond the field of science into that of philosophy.

In connection with the thought just expressed about science criticizing our false notions and religious belief, it may be interesting to note the disagreement between the common sense notions of the evidences of God, and the conclusions held as a result of our advanced scientific knowledge of the world. Common sense regards miracle or the lack of fixed law as sufficient evidence of God. The fiat of God's will is the controlling force of the world. The view is growing fast, however, that the strongest concrete evidence of God is the regulation of the world order in conformity to rigid and exact laws.

It may be said that neither common sense nor science, nor both of them together, can offer a satisfactory basis for religion, or a complete explanation of our religious experience. Common sense must give way to science and philosophy, and philosophy must not exclude any values of our life, if we are to get a complete view of the religious life and experience.

4 PHILOSOPHY OF RELIGION AND METAPHYSICS. Enough has been said already to show that the facts of our religious life must be interpreted in the light of their relation to life as a whole, if we are to gain an adequate conception of the values of religion for life. That is, there must be a philosophy of religion. The philosophy of religion is only a part of the larger

philosophy of life, or experience in its relation to the whole.

It ought to be clear also that the deeper questions of religion must always seek their answer by reference to the whole of life and so it will never be possible to answer the questions of religion independent of metaphysics and epistemology. The questions of the philosophy of religion as to God, Immortality, and the Soul, would be meaningless except as viewed in the light of what we know about being and reality as a whole. If these concepts of God, Immortality, and the Soul have no reality, then there can be no real meaning or value attached to them. It would seem rather strange from a thoughtful point of view to ask, what is our duty toward God until after we had asked concerning the nature and reality, or being of God. But the question as to our duty towards God is one for the philosopher of religion, and that concerning his nature and reality is a general question, the answer to which must be given by metaphysics. Similarly the questions as to immortality and the soul raise deeper questions of metaphysics.

*metaph - but
epist - reality*

We must rise above the low plane of common-sense thinking in regard to our religious life to the greater heights of science and philosophy. And all philosophical questions of religion and life go back ultimately to metaphysical questions of being or reality.

5 PHILOSOPHY OF RELIGION AND EPISTEMOLOGY. Just as we have seen that the great questions of religion cannot get their final answer on the plane of common sense and science, but must go back to metaphysics, so we must now observe that no question of the reality or being of a thing can be raised without raising at the same time the question as to our knowledge of such being or reality. We are here reminded again of the inevitable connection between metaphysics and epistemology. Hence the questions of religion raise not only metaphysical problems, but problems of knowledge, or epistemological problems. The objects to which the religious concepts refer could have no value for reality, if it is in their nature to be unknown. Hence in our consideration of the religious aspects of our experience, we must not allow that any myopic vision leads us into thinking that such ultimate questions as those raised by metaphysics and epistemology have no meaning

mind

for religion. We have defined already ultimate reality in terms of personality. Our knowledge of reality as such is only our knowledge becoming more completely self-conscious.

6 PHILOSOPHY OF RELIGION AND LOGIC. Nor can we ignore logic in seeking the deepest questions and answers to our religious nature. Logic, as we have seen, is the most abstract and most exact of all the sciences, and defines the laws upon the basis of which all truth is determined and all correct methods of seeking answers to our problems are based.

The logical test of truth is that of consistency. Truths that contradict each other are not truths at all, for it is the nature of truth to be consistent with itself and the whole of experience. Truths that do not fit into a larger and more inclusive organic whole are in need of greater refinement, made possible only through greater rationality.

The truths claimed for religion, then, "must not outstep the bounds of logical consistency, the ultimate test of all truth. We must always be ready to subject every belief, theory, or supposed truth, to this logical test of consistency with all our experience in its unity. What will not find its place in such a system of universality is no part of truth, and must be rejected. If then, we find after reflection and reason, that our views about God, his nature and reality, or the problem of Immortality, or the Soul, or any other religious problem, are not consistent with the whole of life and experience, or all other truths, we must reject such views as are logically untenable.

We are not to count it a loss if reflection forces us to abandon certain of our unsupportable religious views, but rather count it a gain in the direction of a deeper insight into the real nature of truth and reality. We should always stand ready to sacrifice a lower interest, or truth for a higher. Indeed this is ethically and religiously enjoined upon us in the interest of a better and higher life.

7 PHILOSOPHY OF RELIGION AND ETHICS. Little more need be said to make clear the fact that religion and morality are closely related, and hence philosophy and ethics, which define the principles underlying these fields of interest are also

very closely related. Carpenter says: "The rank of a religion is settled by the degree in which ethics is linked with it." (*Witness to the Influence of Christ*, p. 50.)

If man's beliefs and theories affect his practices, and it would seem that no argument is necessary here to show that such is the case, then it requires but little reflection to see that "Sooner or later fundamental errors of belief must reproduce themselves in practice, and this is as true of education as that of which it is said, namely, religion." (Bowne, *The Essence of Religion*, p. 180.)

In both religion and morals the emphasis is placed on duty and responsibility. Religion defines man's duties toward God; ethics defines man's duty towards man, T. Parker says that "without a moral nature, we could have no duties in respect to man; without a religious nature no duties in respect to God." (*Discourse of Religion*, p. 29.)

Religion is related to mortality much as the larger of two concentric circles is related to the smaller. Religion represents a wider system of interests or values but must always include mortality, or it becomes barren formalism. Hoffding says: "Religion represents the best means for the conservation of the finest human values." (Cf. *International Journal of Ethics*, Vol. XX, p. 467.)

8 PHILOSOPHIES OF RELIGION. From the foregoing we can see that the chief problems raised by the questions of religion from the philosophical point of view are the nature and reality of God, immortality, and the soul. The problems of the universe are given different answers by the different philosophies. There are then as many different philosophies of religion as there are different philosophies of life, for each system of philosophy answers the special questions of religion in the light of its own larger view of life as a whole. We must now give some attention to the different answers proposed by the different systems of philosophy to the problems of religion here mentioned.

9 THE RELIGION OF PLATONISM. Let us consider first the religious aspects of Plato's philosophy. According to Plato religion consists of the contemplation of the idea of the good.

The highest religious concept that it is possible for man to obtain is the idea of the good. Which idea did not differ materially from our conception of the ultimate reality. Indeed it was the all-inclusive reality. It was the one idea that included all lesser ideas. It was the one purpose that included all other purposes, the highest of all value, the only worthy object of contemplation. Man was most moral and religious when his only occupation was that of the contemplation of this idea of the good. It was possible to gain an insight into this reality only through rational reflection. Such a view of the good was hidden from common sense. Only the philosopher was able to conceive of the highest good. Good was thus conceived by Plato to consist of the knowledge of ultimate reality, as the system of purposes and ideals, or values. This object of our understanding enjoined upon us certain obligations. We could not if we desired, deny the reality of such an object. Nor could we fulfill our obligation toward the universe of which we are a part without showing obeisance to the ideal. There was no other religious obligation according to this philosophy than that of contemplating this ideal of ultimate good or reality. The highest good was given metaphysical reality and could be known, and it becomes our ethical and religious duty to know this idea of the good.

It is plain to see the ascetic element in this sort of philosophy of religion, and as time went on this element became more prominent in the different views of religion, as we shall see in the next paragraph and later in mysticism.

10 THE RELIGION OF NEOPLATONISM. Plotinus was the intermediary between Plato and the Christian religion. He carried out many of the doctrines of Plato into the field of Christian religion and we find to this day distinct evidence of Platonic philosophy. Especially do we find the elements of mysticism drawn from oriental philosophy. Plotinus stressed particularly the ascetic element of the Platonic philosophy. We will remember that according to Plato religion as well as morality consisted of contemplation of idea of the good. No stress was laid on the side of religious duty or obligation, other than that of contemplation and reflection. This feature of the Platonic philosophy probably was more prominent than

any other, and certainly it was the aspect of his doctrine that received the greatest emphasis at the hands of Plotinus and as we have said, it was this element which was carried out into the Christian religion and there gained such prominence in the religion of the medieval ages, a period during which the scholastic philosophy exercised its greatest influence, and indeed was the chief philosophy of the times. It is strange that our Christian religion to-day has not succeeded in getting away entirely from this mystic element in Plato's philosophy. We have not yet come to realize fully that faith alone without works is dead. Man must act as well as think, in fact, thinking is only one side of our life and cannot be substituted for the whole. It may be true that exercise of our thought power is productive of the highest pleasures, but this does not signify that man can release himself from all moral obligation on the grounds that he is exercising his capacity for thought and pleasure. This is just as true in the field of religion as it is in that of morality. We cannot excuse ourselves for our delinquency on the grounds that we are engaged in the contemplation of the idea of good, or God. We must engage ourselves constantly in the attempt to realize this good in our actual lives. It was this failure of the Platonic philosophy that led perhaps more than any other single factor to the asceticism of the medieval ages. Indeed there are plenty of evidences that man has not overcome this false conception of religion completely even to this day. There are plenty of people who still think they are holy and religious just because they fold their hands and contemplate their God. They have not realized fully the force of Christ's statement when he said that not all who cry, "Father, Father," shall be received into the Kingdom of Heaven. Man has duties to perform in the world, and some of these are with respect to fellow-men and others toward God. Not in all cases will our knowledge of the object of our worship, or of the principle of our action excuse us from the obligation of doing our part in the world.

II THE RELIGION OF EPICUREANISM. Epicureanism did not distinguish the pursuit of happiness and the religious life. The only religion for the Epicureans was that of pursuing pleasure. There was no other duty toward God or man than

that of so directing our actions as to secure the greatest amount of pleasure. It can be seen readily what the answer to the questions as referred to above would be according to such a philosophy as this. According to Epicureanism man cannot know whether God exists or not. He does not trouble himself about such metaphysical questions as the being or reality of the soul or its immortality. Our greatest thought was to seek from life the greatest amount of happiness possible. We should eat, drink, and be merry to-day, for we may die to-morrow, and we should not let any pleasure slip from us in this life with no more grounds than the mere hope of its being regained in some state of our future existence. We cannot afford to give up a certain pleasure for one that is so extremely doubtful. Such a practice would be hazardous and would succeed in depriving us of the only real good that life possesses, so far as we are able to know this end. Epicurus said: "Be virtuous, because virtue will bring the greatest amount of happiness." Zeno said: "Be virtuous because you ought to be." The only justification that any one would have for holding to this faith in God would be that it brings happiness to the individual who holds such a faith. This faith did not, however, get full expression in the philosophy of Epicureanism. It was left for modern pragmatism to give further expression to this view.

12 THE RELIGION OF STOICISM. According to stoicism, man's highest obligation consists in rigid conformity to duty and to law. The stoic conceived the universe as the revelation of a great law. It was a sort of pantheistic religion. God expresses himself through all in our experience, which experience is not fortuitous and unsystematic, but is governed according to rigid mechanical law, and the highest obligation that God has placed upon man is that of conforming rigidly to the letter of this mechanical law. It expressed a sort of fatalism, but asserted that man whether he desired to do so or not, must conform to the laws of the universe and in so doing he is virtuous. Piety consists in reverent obedience to this mechanical law. The highest search that man could indulge in, is that of finding the law which controls his nature. Thus the stoic doctrine did not lead toward asceticism as did Neoplaton-

ism as expressed by Plotinus. On the contrary, it was an energetic doctrine of religion which defined man's highest obligation to God as that of finding the secret law of the universe by which his nature is ordered and governed. This is the answer which stoicism gives to the problem underlying the field of our religious experience. In short, this is the philosophy of religion as outlined by stoicism.

13 THE RELIGION OF POSITIVISM, NATURALISM, AND MATERIALISM. There are certain religious aspects of the philosophy of positivism, naturalism, and materialism of which we must take account at this point. According to the philosophy of positivism, religion is not a fundamental element in the life of man. It is only a certain stage of his development. It will soon pass away just as mysticism in many of its forms has come and gone. There is, then, according to the philosophy of positivism no distinct place in the life of man for religion. Consequently this aspect of his life is to be regarded only as temporary and not needing any special training or development. We can see plainly what this type of philosophy would mean for education. Positivism is a radical sort of empiricism, and relies on no truth which cannot be verified in experience. It mistrusts all hypotheses beyond those which can be verified directly in this way.

Naturalism differs somewhat from positivism in that it does not go quite so far in its sceptical attitude toward religion. It does not deny that there is a God, or assert that reverence to him is not worth while, but it does contend that nothing can be known beyond the realm of science. This practically takes God out of the universe, since it is impossible to find, as we have seen many times before, sufficient warrant from science for the belief in a personality directing the affairs of the mechanical world. Naturalism does not deny in such a positive fashion the value of religion, but it does assert that all that is beyond the realm of science cannot be known, and since God has a personality, if he exists at all he is outside the mechanism of science. It follows logically that the existence of God cannot be known. Such conceptions refer to the unknowable. This amounts to practically the same thing as a positive denial of the existence of God, for what value is

there in such a being, if his existence cannot be known, or in some way posited in our thoughts?

Materialism sees the whole story of life told in the mechanical relationship of things. There is no God in the universe unless you want to say that the mechanical order of the descriptive science deserves to be personified and worshipped. Materialism considers matter as the first and ultimate principle of all life and existence. There is nothing behind or beyond matter. If God is to be conceived of at all, it must be in terms of these mechanical concepts of the world of descriptive sciences.

It is plain from what has been said with regard to positivism, naturalism, and materialism that these systems of philosophy make very small place for religion in the life of man, and consequently they would give no place for religion in the process of education. All three forms are agnostic and sceptical as regards the value of religion and the life of man and the universe. There is not according to these philosophies, any special set of religious values which man should strive to realize in this life through the process of education.

14 THE RELIGION OF MYSTICISM. Let us turn our attention for a moment to another type of scepticism with regard to the value of religion. Mysticism has as its central theme the religious life, but religion cannot be subjected to the same order of thinking as can other aspects of life. The only way to know God is to perceive him in the moment of complete immediacy. Knowledge as a means of passing from what is known to something unknown is denied. The only way we really can know is to deny that we have any knowledge of the process by which thought moves toward its goal as having any value whatsoever. Mediation through thought will not lead man Godward. The only way by which he can gain any clear understanding of God is by denying all thought as having any value and plunging directly or immediately into the perfect moment of immediate experience. In such moments as these there is no distinction between the knower and the known, but through the denial of the validity of the knowing process we plunge into the very heart of reality itself. This mystic element in philosophy has worked its way from the

oriental philosophy up through Plato and Plotinus into the Christian religion of the present day. It is not an uncommon thing to hear ministers in our pulpit to-day deny the validity of knowledge arriving at the experience of true religious value. Knowledge is regarded as having certain practical value for the universal life of religious experience. It is probably that this element of ascetic contemplation has occupied a more prominent place in this type of philosophy than in any other. The all perfect moment is a moment of isolation and abstraction from the world of time and space and a complete absorption into the world of ultimate reality. Mysticism is a type of epistemological scepticism. No doubt there is great truth in much that is contended for, in the philosophy of mysticism. The value of the religious life as contemplated by the mystic probably does not differ greatly from the æsthetic contemplation of the lover of the beautiful. Indeed it would be hard to say just how much of the platonic conception of the idea of the good has come down to religion. Mysticism is more of a religion than it is a philosophy, and might more profitably be classed as such, yet it has certain philosophical implications which we cannot pass by lightly, if we are to gain a very comprehensive view of the place of philosophy and religion in the life of man. Philosophy broadly conceived, considers all the interests and values in human life, and religion affords one of these sets of values. It cannot be true, therefore, that the philosopher can pass by unnoticed the field of religious experience. He enters this field as a critic and as an evaluator of experience, just the same as with any other field.

15 THE RELIGION OF PRAGMATISM. Pragmatism thus differs from materialism in that it does not deny the existence of a personal God, and it differs from naturalism and positivism in that it does not confine this conception to the realm of the unknowable. The truth of the God hypothesis, of immortality and the soul, can be tested in the same pragmatic way that we can test the truth of the principle of gravitation. That is, it can be tested in our actual life, and can be used in such a way as to adjust our life to the truth it contains.

According to the religious aspects of the philosophy of pragmatism, it is quite consistent with the larger view of life and

experience, that we attribute to it certain religious values. In this respect we notice its conflict with positivism and naturalism.

16 THE RELIGION OF IDEALISM. The religious aspects of idealism will next be considered. It will not be difficult to see, from what has gone before, what view the idealist has of the religious life. It is upon the basis of this philosophy that the present volume has been written and the reader need only be reminded of certain implications of idealism in order to see what it has to offer in the way of a criticism and estimation of the religious values of experience.

According to idealism the world is not a mechanical order as materialism asserts. Neither is it a purely physical connection beyond which nothing can be known, as positivism and naturalism assert, nor again is it the common sense world with the refinements of pragmatism, according to which the highest truths are to be proved by verification through the facts of experience. Idealism starts just where all the other philosophies of life start, and should start, that is with the facts of our experience. It does not end by denying the validity of our experience, as does mysticism; nor does it end by developing a highly refined system of laws and connections between the facts of our experience and the denial of what is beyond such a connection, as do positivism and naturalism, nor does it end by asserting that the truths of our experience are to be verified ultimately by reference to facts of our experience. On the contrary, idealism begins with the facts of our experience and follows the naturalistic philosopher to the completion of their physical and causally connected universe into one great system, but he goes beyond them and asserts that the real meaning of the universe is not to be found in such causal explanations of physical science. He asserts that such connections are only the expressions of the demands of our own purposive will. The deepest truths and meanings of our experience, then, are not to be found in the facts, or in their connections, but rather in the relation of these facts to our will. The great problem of the philosopher, according to the idealist, is that of finding our deeper will connections, and not merely the connections of facts related in a time and space order of things.

The study of the external facts of our experience merely reveals the inner connections and relatedness of man's will and purposes, and the greatest of all problems is to see the relation of these inner will connections in an over-individual will of the absolute, who is the complete and infinite personality, and the conspectus of all experience. This universal will is not to be found in the temporal and spacial world. Rather time and space are included within this infinite personality. God is thus conceived as the final cause of the universe; as in infinite personality, and the systematic unity and harmony of all will and purposive attitude of life. God is the absolute will and the infinite knower of the universe; he is the cause of all cause; the beauty of all beauty; the reality of all reality; the truth of all truth; and the good of all good. Thus we see in the idealistic conception of God, or the Absolute, the systematic unity of all meaning and reality. According to this conception of God, the highest concept is that referring to his inner meaning and nature. Very different is this view from that of naturalism and other forms of agnosticism referred to in the above section.

17 SUMMARY. According to the foregoing sections of this chapter it is plain to see that philosophy attempts to criticize experience, and to ascertain its meaning and value. Such a view must include necessarily a religious element of our experience, and the philosophy of religion, therefore, becomes a criticism of the principal beliefs, values, and purpose of our religious life. Such criticisms and estimates of values cannot be left entirely to any one or all of the sciences, for they give us nothing of the nature of eternal values but instead they give us a system of causally connected phenomena in a time and space world. A mere description of facts of the religious experience will not give us their meaning or value for life. It must be left to the philosophy therefore to criticize and evaluate the religious experience. Naturalism and positivism attempted to deny all values of the religious sort, and materialism, by virtue of its acceptance of the materialistic principle, denied to religious experience all value other than those of physical connection and causal relation. Mysticism attempted to escape the bonds of causal law and asserted that the value of ex-

perience counted for nothing in the religious life, and asserted that it is only when we proceed by denying the validity of experience that we can become conscious of the truly religious values of life. Idealism, on the other hand, asserted that we should start with the experience of this life, fragmentary though it is, and using this as a starting point we should seek to determine the inner connections of these facts, which connections it is asserted must be found inevitably in the connection of our wills and purposes. Each individual will thus become a part of the universal whole or absolute will which is the supreme ideal for each part or individual.

18 EDUCATIONAL IMPLICATIONS OF THE PHILOSOPHY OF RELIGION. Let us briefly summarize the educational implications of these different philosophies. In general it must be said that the philosophy of religion is only a part of the wider philosophy of life. It has also been said repeatedly that the philosophy of education is only a part of the wider philosophy of life. Thus it becomes plain that the philosophy of religion and the philosophy of education are related as parts in the same larger whole. From this we easily deduce the proposition that the ethical and religious aspects of education are simply two aspects of a wider philosophy of life. We have seen already and we later shall come to see more clearly that the ethical aspects of education are most clearly seen when we consider the aims and values in this field of experience. It is in this same connection that we come into closest contact with the religious aspects of education. Every educational aim implies a certain concept of ethical and religious values. There are certain reasons why we prefer certain ends to others, as we shall see in Part V. The ultimate aim of education implies certain religious as well as certain moral attitudes toward the world. Thus it becomes impossible to separate entirely the ethical and religious aspects of life and education. With these principles in mind, we can see that the philosophy of education based upon the philosophy of naturalism, positivism or materialism would leave no place for religious training. According to mysticism the only training would be that of the denial of the validity of our experience. Such a philosophy would contradict itself for such training would, according to

mysticism have the value of showing the futility of our experience at least, hence the contradiction. According to pragmatism, the religious life has value, and it would not do to neglect it; but here the test is insufficient from the point of view of strict logic, since it regards the ultimate test of all truth as that of verification or apperception. James says: "The truest scientific hypothesis is that which as we say works best; and it cannot be otherwise with religious hypothesis." (James, *Will to Believe*, p. 12.) Idealism makes specific provision for training of the religious life. It regards the values in this field as of equal importance with those of truth, beauty, and goodness. As we proceed in this volume we shall see reason for the belief that idealism provides a more satisfactory philosophical basis for education than does either one of the above-mentioned systems.

Let us now turn to the æsthetic field of experience. Here our ideal will shift from that of religious life, or a life lived in perfect harmony with the universe as a whole, to the ideal of the beautiful. Our question will be, what is the nature of the beautiful? We shall consider the different theories of the beautiful, and finally their implication for educational theory.

CHAPTER VI

THE ÆSTHETIC ASPECTS OF EDUCATIONAL THEORY

I MEANING AND DEFINITION OF ÆSTHETICS. Æsthetics has been defined as the science of the beautiful. It aims to give a complete account of the principles and laws underlying art, in so far as it is a descriptive science. In so far as æsthetics is philosophical it has to do with the meaning and value of the æsthetic experience. Æsthetics, then, is both a descriptive and a normative science. It is to be regarded as a descriptive science when we are considering the principles and laws underlying the production of the work of art. It is to be regarded as a normative science in so far as we are concerned with the ideal values, purposes and meaning of the artistic experience. We must distinguish between art and the science of art, and also between art and the philosophy of art and the science of art, and also between art and the philosophy of art. In other words, we must distinguish between art as a descriptive science and art as a normative science. Art is related to the descriptive sciences just as carpentry is related to the science of geometry, or just as the art of practicing medicine is to the science underlying it. Every art has its science, which consists of a systematic and orderly grouping of the facts and laws underlying it. From the point of view of descriptive science, art is built upon certain laws or principles of physics, mathematics, psychology, and other descriptive sciences. From the point of view of normative science or philosophy, art has certain meaning and value for life. The philosopher of art is concerned with the underlying meaning and value in the æsthetic field of our experience. He is not concerned with art as mere description and explanation, but rather is he interested in the interpretation and evaluation of the æsthetic experience as viewed from the standpoint of a philosophy of life as a whole. The scientist is interested in art as a connection of principles

and laws. The philosopher is interested in art as having a meaning and value for human life. The scientist conceives art as a connection, but the philosopher sees in art values for life, he views it not as connection but as isolation. The greatest value of art, unlike that of science, does not consist in its connection with other things, but in its isolation from all parts of our experience. It is this isolation which makes possible the only value which art possesses.

2 THE RELATION OF COMMON SENSE AND ÆSTHETICS. Common sense sees in art a certain value, but here, as in every other field of experience, common sense is a poor judge of meaning and value. It is characteristic of common sense to see things dimly, and we have noted already that the particular difficulty with our education to-day lies in the fact that it rests too much on common sense rather than on a scientific and philosophical basis. The only hope of progress in education lies in the same direction. The principles of art must be determined on the basis of a thorough scientific understanding of the descriptive laws that lie at its very foundation, and from the philosophical point of view its only hope lies in regarding it as a integral part of a wider life and experience. Art must therefore be taken from the field of common sense and placed upon a sound scientific and philosophical basis. Its aims and purposes and values must be defined clearly by philosophy, while its principles and laws must be formulated by the descriptive sciences. Art must, therefore, rely less on common sense and turn to a stricter formulation of the principles, laws, and purposes than is made possible by common sense. From the foregoing it is clear that art is both a descriptive and a normative science.

3 THE PSYCHOLOGY VERSUS THE PHILOSOPHY OF ART. Let us now turn our attention to one particular view of art from the descriptive side. I refer to the psychology of art. We shall note the distinction between the psychology of art and the philosophy of art. This will help us to get more clearly in mind the distinction between the larger views of art taken by the descriptive sciences generally and philosophy.

From the psychological point of view art is to be regarded as built upon certain principles and laws of mental action. Every work of art must conform to certain modes or principles of mental behavior. If the work of art fails to take these into account it cannot be regarded from the psychological point of view as a real work of art. In short all real works of art must take account of all the principles and laws of psychology. Now the formulation of these principles which underlie art is to be regarded as the work of a psychology of art, or it is art viewed from one particular angle as a descriptive science. The psychology of art like any other descriptive attitude has no right to say what the aim, purpose, or criteria of art shall be. It is simply concerned with the principles or laws of psychology that are involved in the artistic production. The descriptive sciences including psychology cannot be ignored by the philosophy of art. In other words a complete æsthetic, or science of art, involves a consideration of art from both the descriptive and normative points of view. Furthermore, a complete theory of art involves a statement of the aims, purposes, and values of art on the one hand, together with the principles and statements or laws underlying art as formulated by the descriptive sciences, particularly psychology. Psychology gives us a mere picture or description of the laws involved in the production of a work of art. From the psychological point of view, we are concerned with those laws that are active in consciousness as we observe the work of the artist. We can describe and explain the facts of æsthetic experience from this point of view, but we cannot go any farther than this. We cannot say that art is valuable or not valuable, that it should exist or not exist. When we take such an attitude as this, we are viewing the work of the artist, not from the impartial point of view of the descriptive scientist, but rather from the ethical or religious, or some other normative point of view, where our will counts for more than mere connection and description.

Psychology, like the other sciences, is an artificial construction made for the purpose of satisfying the demand of our will and its purposes; and the purpose of our will in setting up the artificial construction of psychology is so that we may view

our mental life not in its reality, but in its causal relations and sequence in the world of time and space—that is, in satisfying the logical demands of conception. Art, on the other hand, is interested neither in the causal relation of facts of our experience, that is, not an artificial construction in the interest of connection; nor is it interested in connection at all. Its value is in its isolation of a part from the whole, which isolation brings us into more immediate contact with the reality of the thing represented. Art and science are thus two independent approaches to the same reality—the one through connection, the other through isolation. There is thus no occasion for their interference. Much different does art appear when we view it from the philosophical angle or the angle of normative science. Here we are concerned with an interpretation of art, with its relation to the whole of experience, its meaning and value for life as a whole. From the psychological point of view we were interested in the connection of one fact or law with another, and so viewed art as a systematic unity of these principles and laws. But in such a view we never get beyond the mere fact of the temporal and spacial order of things, but a complete theory of art involves not only a statement of the is, but of the ought also. We must therefore call upon the philosopher for a criticism of art in its relations to life as a whole. The philosopher, unlike the psychologist, views art in its relation to other activities and interest of life. He criticizes art on the basis of its relation to life as a whole. It is in just such a relation to the unity of life experience that art gains its significance and value for life. And such value and significance must be determined by the philosopher who views life in its unity.

From the point of view of descriptive science art, as we have already indicated, gains its significance through its connection with other facts of our experience. From the normative, or philosophical aspect, art gains its significance through its isolation. The work of art must be such as to be wanting nothing; it must suggest the unity of life as a whole. It must present a moment of complete satisfaction, where nothing is wanting or desired. The artist succeeds in showing life in its completion by rounding our partial experience. It is only through the suggestion of the unity of our experience that

the artist is unable to present a picture of such a completed state of existence. Art is the concrete embodiment of an ideal, and like all ideals, it suggests a state of existence more nearly perfect and complete than any obtained in actual experience. This representation is not barren formalism, but actually suggests a deeper reality which is felt, but which is not experienced in the world of causal connection, in the time and space world of sequence and phenomena.

We can see, therefore, that it is possible to approach art both from the descriptive and from the normative sides of our experience. Miss Puffer says, "We can approach such an aesthetic canon in two ways; from the standpoint of philosophy, which develops the idea of beauty as a factor in the system of our absolute values, side by side with the ideas of truth and of morality, or from the standpoint of empirical science. For our present purpose, we may confine ourselves to the empirical facts of psychology and physiology". (*The Psychology of Beauty*, p. 12.)

4 THE IDEAL OF ART. As was suggested above, the philosopher must decide upon the ideal of art, or perhaps it would be better to say that the artist must view his art in the light of a wider philosophy of life. The only way to ascertain what is a reasonable and worthy ideal of art is to consider it in the light of experience as a whole. A view less comprehensive than this will not suffice for fixing upon a worthy ideal of art. The ideal of the artist must be such that when concretely embodied it provides for the complete satisfaction and unity of life as a whole. It must realize the perfect moment and suggest through its isolation the completion of what is only partially revealed in life viewed as a causal order. H. C. King says: "Here lies one of the great reasons for the place and power of art. It has an ideal but it always presents this ideal concretely. It is no abstraction. It is so far, therefore, akin to life itself, for the very problem of life is the embodying of ideals. Art and literature therefore, make an appeal that no abstract principle or ideal can make. We can never speak in general. We can never act in general. We can never be good in general. It is all in particulars. We have no way of expressing a general principle,

but by putting it into some definite concrete individual action. Now, art and literature give us always such a concrete embodiment of an ideal, and so approach the strongest of all influences, the influence of a person." (*Rational Living*, p. 214). In this connection it is worth while noticing Paulsen's conception of the function of art. He says, "It is the highest function of art to shape and express the ideals which the spiritual life of a nation creates. The ideal world reaches its highest expression in a supermundane superhuman world, in which perfection has absolute reality for faith. Thus art becomes the organ of religion. Its highest function is to realize the innermost cravings of a people, to contemplate its ideas of perfection in concrete forms. So the plastic arts produced concrete representations of the Greek gods,—glorious figures in which the Greek's ideals of human culture were made visible to him. Similarly Greek poetry gave to the people in its epics and its dramas living pictures of divine and human excellency, such as courage, loyalty, devotion, magnanimity, prudence, wisdom, and piety. Christian art, too, has performed the same necessary function of converting the realm of faith into a world of concrete intuitions. The entire medieval art, architecture, sculpture, painting, music, and poetry, had for its sole object the presentation of the world of Christian faith, in the form which this had assumed in the Germanic mind, to the senses and the entire man." (Paulsen, *System of Ethics*, p. 558.)

But from the point of view of the wider philosophy of life, art must not only fulfill the conditions thus specified, but it must also be in accord or harmony with life as a whole. The purposes and values of art must not conflict with those of all life. There is therefore a criticism of art which may be regarded as ethical or religious.

5 THE STANDARDS OR CRITERIA OF ART. What are the standards, or criteria of art? This question has quite as much significance for the artist as the question as to the criteria of morality has for the ethicist or moral philosopher. Indeed this is one of the central questions with regard to the practical aspect of art and morality. We must have not only standards of the beautiful and the good, but we must have means of

determining how far we are realizing these ideals or what conditions are essential for their realization. The question then, is what are the means for determining what a really good work of art must be. From the foregoing section we learn that the ideal of art is that of beauty. We found that the æsthetician in his philosophical criticism of art asserted that beauty is the ideal toward which the artist should strive. But just what does he regard as beautiful?

What are the essential attributes of beauty? What conditions must be fulfilled in order that all of the requirements of the beautiful may be satisfied? A criticism of the nature of the beautiful reveals harmony, symmetry, proportion, balance and unity to be essential attributes of a work of art. Without such qualities as these no real work of art is possible, for with the lack of balance there is suggested a deficiency in one part of the work of art, and this suggestion of incompleteness is in direct opposition to the suggestion which a real work of art affords, namely, that of completed perfection and harmony of life, or, as we have said above, the concrete embodiment of life's ideals or purposes. The criteria or standards of art, then, must be those of harmony, proportion, and balance. There must be unity so complete and perfect that there is no suggestion of anything lacking. Münsterberg says: "The painter shows us a spot of the world in complete self-agreement. Every part harmonizes with every other part. Unity is the great secret of the realm of beauty. Literature shows us the life of man in this complete restful unity." (*Psy. and Teacher*, p. 58.) "Art must inhibit action, if it is perfect. The artist is not to make us believe that we deal with a real object which suggests a practical attitude. The æsthetic forms are adjusted to the main æsthetic aim, the inhibition of practical desires." (*Psy. & Ind. Efficiency*, p. 273.) We must always distinguish between the fine arts and the industrial or practical arts, if we are to see clearly the æsthetic ideal and criteria. Hyde says, "The aim of the mechanic arts is utility, the satisfaction of felt physical or social needs. The aim of the fine arts is beauty, or the satisfaction of the æsthetic feelings." (*Practical Idealism*, p. 115.)

This unity and isolation in the fine arts is essential in order that the ideal of art which is the complete satisfaction

of life may be attained. Such a realization of the perfect moment is possible when nothing is wanting. We must cease to regard things as connected and see all of the parts in their perfect unity and organic wholeness. We must, then, in this moment of appreciation or interpretation shift our point of view from that of the descriptive sciences or causal connections as the ideal, to the position of the æsthetic science, where unity and completion are to be found in isolation, rather than in connection.

6 THE RELATION OF METAPHYSICS AND ÆSTHETICS. We must concern ourselves now with the deeper meaning of the æsthetic experience. We must seek whether or not the ideal of art has any reality. Is the ideal of art simply a vision, or does it possess reality? This is a question for the metaphysics of art, and is a part of the wider philosophy of art. It would be useless to inquire into the ideal of art if such an ideal has no reality in the universal system of things. We can view art from the metaphysical point of view the same as from the ethical or religious, and from this angle the question is always concerned with the reality, or being of art. It is in this field that we concern ourselves with the most fundamental questions of the æsthetic experience. We must ask ourselves the meaning of this ideal of art for the whole life which we live. If the ideal of art has no reality, then it is not worth striving for. It has no value. But philosophy is searching for the value of life, and since the æsthetic experience is a part of life as a whole, we must expect that the ideal of art will constitute a part of ultimate reality, or the final being or nature of things. I do not mean to suggest that the artist constantly must ask himself concerning the reality, or being of the ideal of his art, but I do mean to say that unless such an ideal has reality and belongs to the total system of things it is not worthy to be regarded from the philosophical point of view as being any part of life. Miss Puffer says well, that "Every introduction to the problems of æsthetics begins by acknowledging the existence and claims of two methods of attack,—the general, philosophical, deductive, which starts from a complete metaphysics and installs beauty in its place among the other great concepts; and the empirical,

or inductive, which seeks to disengage a general principle of beauty from the objects of æsthetic experience, and the fact of æsthetic enjoyment: Fechner's æsthetics from above and from below." (*The Psychology of Beauty*, p. 29.) There is no real occasion for conflict between the metaphysical and psychological points of view in art, for as Miss Puffer says, "If a general concept expresses, as it should, the place of beauty in the hierarchy of metaphysical values, it is for the psychologist of æsthetics to develop the means by which that end can be reached in the various realms in which works of art are found." (*The Psychology of Beauty*, p. 138.)

Metaphysics, as we have seen before, raised the ultimate and final question as to the nature and reality of all existence. The case is not different when we concern ourselves with the field of art. We have seen in the foregoing chapters that metaphysics raises certain fundamental questions as to the religious view of life and also the logical. What value would the religious experience have if after its ideal were realized it were found to have no place in the reality of the universe, or what would the logical values of truth be like if they had no reality or true being in the internal structure of things? We shall find in the following chapter that ethics raises similar questions which must be answered by metaphysics. The case is not different with education, business, politics, and social life. No matter from what position we regard life we cannot begin to ask fundamental questions without regard to the ultimate meaning and reality of experience.

7 THE RELATION OF LOGIC AND ÆSTHETICS. We must remind ourselves also that a final philosophy of art cannot be given unless we take account of the theory of knowledge, or epistemology. Epistemology as we have noted already is the philosophical discipline which concerns itself with the nature and extent of knowledge. It raises such questions as, what can be known, and how is knowledge possible at all? It ought not to take a great deal of reflection to see that æsthetics raises certain epistemological issues, for example, how can we know the ideal of art or the standard of art? How can we distinguish the æsthetic experience from any other set of experiences in life? These questions raise the epistemological

problems. It is not my purpose in this chapter to settle the problems that are raised by æsthetics in these special fields of metaphysics and epistemology, but rather it is my purpose to show how inevitably all these philosophical disciplines are connected. It is not possible to settle the question of æsthetics independently of metaphysics, epistemology, logic, religion and ethics. If I succeed in pointing out these connections in the chapters dealing with the special disciplines of philosophy I shall have accomplished my purpose.

It is also my purpose in this chapter to suggest, as I have done many times before, the inevitable connection between education and the special disciplines of philosophy. It is no more possible to settle the questions of education independently of the wider philosophy of the universe, than it is to settle the problems of æsthetics in this way. Indeed our studies thus far should have brought us to the point where we can see clearly the unity of all knowledge.

8 THE RELATION OF PHILOSOPHY OF RELIGION AND ÆSTHETICS. If the last statement be true that all knowledge is inevitably and necessarily connected, it will not be difficult to see the connection between logic and æsthetics. As we have seen from an earlier chapter on the logical aspects of educational theory, logic attempts to define the ideal of the truth relationship. It attempts to show what is necessary in order that truth may be established. It provides the necessary method for asserting the truth of any set of facts in the experience of man. We can carry over this conception to the field of æsthetics without a great deal of difficulty. Æsthetics as we have noted already is only one certain field of our human experience. Logic does not confine itself to the ideal of truth in any one particular department of our experience, but attempts to define truth in whatever field of experience we may search for it. If the ideals of æsthetics are to be worthy of our striving to realize, we must then be certain that they are true, and their truth is to be determined by their connection with the universal system of things. Nothing less than the totality of relationships between phenomena can give us absolute and final truth. According to this conception, as our experience broadens our conception of truth becomes correspond-

ingly broader, provided our insight into the connection of things is developed in the same proportion. The truth of the ideal of art, it developed in the same manner. The truth of the ideal of art and its meaning and value in life are to be determined, not independent of, but in relation to all the fields of experience. We must, then, resort to the universal method of truth provided by logic in order to ascertain the validity or truth of the ideal of æsthetics. Once more we ought to see a little more clearly the close relationship between all knowledge. Strictly speaking, every fact of our human experience can be regarded either from the normative or the descriptive point of view; and from the normative point of view it may be regarded from the special angle of the several philosophical disciplines, and any attempt to regard our experience from one single point of view is a separation and abstraction which often leads us to regard our experience as isolated and fragmentary, whereas the correct view would show us the inevitable connection of all knowledge and life.

Logic attempts in the field of æsthetics to criticize its method of proof, and to show how inference and judgment can be made safely in this field of our experience. Æsthetics can no more separate itself from a wider philosophy than can the normative view of the world separate itself entirely from the descriptive. If we are to see experience as a whole we must see its several aspects in their relationship. The only meaning and significance that art has is that which it derives from the relation it sustains as a part to the universal whole of our experience, and such a relationship is to be defined on the basis of logical principles. Æsthetics, then, like any other special field of experience, derives its ideal values and meaning for life by its relations to the universal whole of things, and such a relationship between part and whole is to be defined in terms of logic. In our study of logic in a previous chapter we have asserted already what the nature of this organic whole or unity must be. A whole is such a relationship of parts that it cannot exist without the parts and the parts have no significance or meaning except in their relation to the whole. We can thus see the logical aspects of æsthetics.

9 THE RELATION OF ETHICS AND ÆSTHETICS. From

the foregoing it is also easy to see that æsthetics cannot be severed completely from religion. The theory of art includes a view of art in its relation to the totality of the universal experience, as viewed from the angle of philosophy. From the angle of the descriptive science, æsthetics is concerned with the underlying laws and principles of this special field of experience. We have noted already that religion can be viewed from two similar stand-points. From the philosophical side religion is concerned with the principles that define the relationship between this special field of experience and life as a whole. Religion and æsthetics are connected thus through being parts of a wider whole of experience, and logic must assert their respective rights and fields as parts of the unity of our experience. With Plato the connection between religion and æsthetics was so great that it was very difficult to distinguish between the two. The poet, according to Plato, gets his visions and inspiration from on high. He says "... for not by art does the poet sing but by power Divine" (*Dialogues*, 1:224). Religion consisted in the contemplation of the idea of the beautiful, or the good. With Plato there was no clear distinction between the values of beauty and those of conduct, or between beauty and goodness. The ideal of the good was at the same time the object of æsthetic contemplation. Indeed Plato's ideal of the good seemed to be more of an æsthetic ideal than it was ethical, for it was not so much of an ideal to govern man's conduct in this earthly life as it was an object of beauty to be adored. This ideal was worthy of reverence and so was placed in the realm of religious values. Man's highest life consisted in the worship of the ideal of the good, which was really a religious reverence and mystical contemplation of the æsthetic ideal.

But Plato does not give us the picture of the most perfect relationship between religion and æsthetics. They must in some essential respects be different, otherwise there would be no reason for regarding them as different models of experience. Æsthetics must always be regarded as having its own ideals and criteria, if we are to regard it as a separate field of experience, and the same is true of religion. We must distinguish between the ideal of the beautiful and the object of religious worship or God, else the two fields of æsthetics and

religion coalesce, and there be no reason for regarding them as separate fields of experience. We must not confuse the ideal of religion with the attitude of religion. Any work which is pursued with a deep and abiding faith and loyalty, or belief in its reality or being, comes to be a sort of religion, but it is just as truly a kind of ethics as it is religion. It was just at this point that Plato failed to distinguish carefully the relation between religion and æsthetics. The artist must have faith in his art, and in its ideal value, and he must pursue this ideal loyally, but he must not imagine that in so doing he is expressing the deepest meaning of religion, for it is only when this attitude takes into account the whole of our experience that it really becomes a religion. It must not only represent man's faith in his art, but his faith in his fellow-men and in his God, before it becomes truly a religion.

IO THE PROBLEMS OF ÆSTHETICS. What we have just said with regard to the relations between religion and art will hold good as to the relations of æsthetics and ethics. R. B. Perry says well, "Art, like all other interests, can flourish only in a sound and whole society, and the law of soundness and wholeness in life is morality." (*Moral Economy*, p. 174) Santayana says, "Art being a part of life, the criticism of art is a part of morals" (*The Life of Reason*, p. 178) Again he says, "The subject matter of art is life, life as it actually is; but the function of art is to make life better". (*The Life of Reason*.) The same close relation between ethics and art is brought out by Caffin when he asserts that "Beauty, then, is that which stimulates and enhances our Need of Life and Desire of Living". (*Art for Life's Sake*, p. 91.) "Beauty and ugliness, in fact, are equivalent to good and bad." (Caffin, *Art for Life's Sake*, p. 141.)

Ethics and æsthetics are very closely interrelated. It would be difficult to say whether æsthetics owes more to ethics, or whether ethics owes more to æsthetics. The fact is that both make contributions to a wider philosophy of life, and that they are so closely related that it would be impossible to make any hard and fast line between them, yet they have their different ideals and their different standards, as well as their different methods. The ideal of ethics is that of goodness, while that

of æsthetics is beauty. The questions of ethics are concerned with the values and standards of conduct, those of æsthetics are concerned with the values and standards of beauty, but the beautiful and the good can no more be separated finally than can the beautiful and the true, or beauty and religion. Ethics has borrowed its conception of harmony and unity from æsthetics, but instead of applying the standard to experience in the field of the artist it is applied to conduct. The standard of conduct is perfect unity and concord of all the purposes and ideals in the life of the individual. This standard is the same for art, the difference being that the artist realizes his ideal in the concrete embodiment of his picture or his statue, while the moralist never does completely accomplish this organic wholeness of life. The moralist must hold this as his ideal, and as Plato says set his house in order by it, but he never can experience the complete unity and harmony of all of this life's interests and purposes, and yet this is his ideal, and this ideal is no less effective because it is not fully realized. Indeed the ideals that are counted of greatest value are those which are never fully attained. We pursue them but never quite reach them. The moral ideal is a flying goal. We think we are about to realize it, then it slips away from us and moves further on. We do not give up in despair, provided we have set up a rational ideal of life, but rather we pursue this ideal with increased zest.

The ideal of conduct is, therefore, borrowed from æsthetics and may be defined as organic unity or wholeness, harmony, rhythm, or balance, but the artist realizes his ideal in the creation of his art. The moralist, however, sees in each action only a partial picture of the life he would live. We shall pursue this thought further in another connection. Here our only object is to state certain fundamental relationships between ethics and æsthetics.

II THE DIFFERENT THEORIES OF ART. The philosopher of art cannot concern himself all the while with the relational aspects of æsthetics. Æsthetics has its own special problem, and a profound consideration of this field of experience brings to light certain special problems which belong to the æsthetician himself. The philosophical view of art regards the chief

problem of æsthetics as being that of defining clearly the ideal of art. We have stated already that this ideal is that of beauty, and we have asserted already that this problem cannot be settled without calling upon metaphysics, epistemology, religion, logic and ethics, as well as the descriptive sciences, particularly psychology. In short, we can say that the problems of art cannot be dealt with satisfactorily until æsthetics is regarded as a part of a wider field of human knowledge. Miss Puffer says, "To find out what is beautiful, and the reason for its being beautiful, is the æsthetic task; to analyze the workings of the poet's mind, as his conception grows and ramifies and brightens, is no part of it, because such a study takes no account of the æsthetic value of the process, but only of the process itself." (*The Psychology of Beauty*, p. 17) Professor Peabody says, "The Problem of art is thus the suggestion of the ideal by the description of the real." (*Approach to the Social Question*, p. 141)

12 THE ÆSTHETICS OF IDEALISM. So far we have considered the different answers that are given to the different questions of art from the point of view of the several systems of philosophy. Each system of philosophy has its own way of stating the relationship between æsthetics and the other branches of knowledge, between art and the other fields of experience. I shall not here go into the matter at any great length, for only in a general way does it concern the special purpose which I have in writing this chapter. I am here concerned with the broader relationships between æsthetics and the other philosophical disciplines. Æstheticians have not always agreed that art must be criticized in the light of a larger philosophy of life. There is, however, almost universal agreement of this point at the present time. Æstheticians differ widely as to the particular value of art, or purpose of art in life, some have asserted that art is simply a play of the imagination. Art exercises the imagination and the mental powers generally in the same wholesome way that outdoor play recreates the physical organism. This is the play theory of art. Other critics of art maintain that art is merely imitation of the reality. Plato gives expression to this view. He considered that the work of the artist who creates the objects

of beauty is thrice removed from the reality which he represents. Such an artist does not deserve to be classed with the real philosophers. The only true artist, according to Plato, is he who gives up his life in contemplation and reverence of the Idea of the Good. Other critics have asserted that there is a certain educational value in art and that while we are engaged in such play of the imagination and imitation of the reality we are developing our powers. This is called the educational theory of art. There is another theory that considers art in the light of moral criticism, and refuses admission to polite society all works of art that are not in perfect keeping with the moral sentiment of man. Plato was a puritanic in art and would refuse to let all artists into his great republic whose work had not been inspected thoroughly in order to ascertain whether or not it was suggestive of evil to the observer. Another group of critics regards art not as a means of imitating some object, real or unreal, but as a means of idealizing some element or portion of our experience. According to this theory the work of the artist is not further removed from reality than the thing which the artist represents, but indeed is closer to reality. It suggests a unity and harmony without which life and reality would be meaningless. There is a certain variety of intuitionism which regards the ideal of art as that of perfection. He is the real artist who can transform the fragment of our experience in such a way as to suggest the ideal which should be the standard both of religion and reality. According to another group of theorists, art is simply a representation. It is simply the presentation in a new form of some object in our experience.

In as much as we are concerned particularly with the philosophy of idealism we are most concerned here with the idealistic view of art. Let us turn our attention for a moment to this view.

13 SUMMARY. The idealist is a rationalist and therefore sees and criticizes all fragments of experience in the light of their universal connection. He views art, therefore, as a certain special field of experience which must be considered in its relation to the whole of experience. The idealist regards art as having many of the purposes which have been sug-

gested in the above section, but it would be well to note here that, as R. L. Stevenson says, "We are not so much in need of views of the universe as in a view of the universe". And so we are not concerned so much with the many different theories of art as to its purposes and values in life, as we are in formulating a single point of view with regard to this field of experience which is consistent with the whole of experience. If art is to be properly criticized, it must be taken in the light of the whole of our experience; and if the ideal of art is to be defined clearly and accurately, it must be in the light of the larger ideals of life as a whole. We must, then, consider what the ultimate aim of life is. What is the chief good for which we are striving, and how is this related to the universal whole, the organic unity of all experience? According to the aesthetics of the type of idealism here reflected the ultimate aim of all life is that of self-realization. The case is no different when we turn our attention to the special world of art. Here the chief value of art must be defined in terms of self-realization. Art is of value, like religion or morality, only in so far as it is productive of the highest type of will and personality. The ultimate aim of life and of art as well of religion, morality, and science, must be expressed in terms of self-realization. Art that is not productive of the highest degree of self-realization is not the highest type of art. We are not to specify the value of art in terms of its tendency toward the development of the play instincts of man; nor in the degree of accuracy of its imitation, or representation of some object which is embodied in the concrete idea of the beautiful, nor is the value of art to be determined alone by its exercise of our thought, judgment, and reason; nor again is its value to be determined on the basis of its idealization of some object of contemplation. The chief value of art lies in the fact that it is conducive to a larger self-development. The highest ideal of life, and the only sufficient ground and motive of conduct, when rightly conceived will, I believe, be regarded as self-realization. The chief value of art does not, then, consist in the pleasure which it produces, but rather in the complete life and organic unity which it tends to promote, and which it is capable of producing in no small degree, chiefly because the ideal of art is the concrete embodiment of this ideal

of complete self-realization or organic unity. We conclude this part of our inquiry by stating that the ideal of æsthetics must conform to the ideal of life. This is only another way of stating that the ideal of beauty is subordinate to the ideal of self-realization. We shall find that the ideal of religion, truth, and goodness must conform to the same ideal, for the one universal end of all striving, of all life, is that of self-realization. We cannot agree with Santayana, then, when he says that, "A beauty not perceived is a pleasure not felt, and a contradiction." (*The Sense of Beauty*, p. 45)

14 THE EDUCATIONAL IMPLICATION OF ÆSTHETICS. We have now defined æsthetics as the science of the beautiful, and have shown that it has both descriptive and normative aspects as a complete theory of art. We have shown the ideal of art to be that of beauty, and the essential criteria of such a standard is that it must possess harmony, symmetry, proportion, and unity. We have shown that the questions of æsthetics cannot be answered alone, but must be considered from the wider point of view of the universal philosophy of all experience, and that consequently æsthetics has its close connections with metaphysics, or the science of reality, epistemology, or the science of knowledge, logic, or the science of truth, and ethics, or the science of the good, and that it also has its religious significance. We are to conclude, therefore, that æsthetics is not strictly an independent inquiry in search of ideals that have no connection with life as a whole; on the contrary, the ideal of æsthetics must conform to the ideals of life as a whole. This ideal is to be found only when we know the deeper meaning and craving of our individual wills. Æsthetics, then, must be viewed in the light of a complete philosophy of life, and beauty, its ideal, must be conceived in its relation to the ideal of life as a whole. This ideal is best defined in terms of self-realization, for this is the only adequate statement of what our deepest will and purpose in life is, and art is to be considered as of value only in so far as it is productive of the larger life or of self-realization. It must not be inferred that æsthetics does not have the privilege of promoting self-realization according to its own standards, which standards, however, must not be chosen arbitrarily, or

without regard to the whole of life.

Very little need be said as to the educational implications in concluding this chapter, of æsthetics. It has been urged that the ideal of æsthetics is to be regarded of value only in so far as it is productive of the highest self-realization. Art, therefore, does have an educational value, and like education, it must at the same time it realizes its own purpose and ideals tend to realize the larger purposes of life as a whole. Both education and art are to be considered in the light of this larger aim, which expresses the deepest will of the individual. We shall see later that the individualistic aspects of this theory cannot rightly be considered as selfish, mean, or low. On the contrary, it represents the highest conceivable ideal both of the egoistic and altruistic impulses, and is the only adequate means of their reconciliation.

We are to remember that education is not a separate field of experience, but that it is the common ground on which the various values of life are to be realized. Education borrows a part of its ideal from æsthetics, just as truly as ethics has borrowed its ideal of organic unity from æsthetics. Up to the present time we have concerned ourselves with three realms of human values, from which education raises a considerable part of its ideal. From logic, education has borrowed its conception of truth; from æsthetics, it has borrowed its conception of beauty; from religion, it has borrowed its conception of the absolute value of religion; from ethics, as we shall see in the next chapter, it borrows the ideal of goodness. Education owes a heavy debt to æsthetics. It is the business of art education to show how the ideals of beauty can be realized through the various agencies of school life and organization. Education thus borrows its ideals from logic, religion, æsthetics, and ethics, and concerns itself with the development of plans and purposes for the realization of these ideals in life.

In this connection it will be instructive to note what others have said as to the relation of art and education. Plato makes Protagoras, chief of the Sophists, say that "Poetry is the principal part of Education." (*Protat.* p. 161) Of all the excellences of his ideal state, Plato says that nothing pleases him more "upon reflection than the rule about poetry", which ruled out all poetry that did not conduce to the ideal of the

good. (*Rep. Bk.*, p. 307) Henry Turner Bailey says, "The purpose of art education is the development of appreciation for the beautiful and of power to produce beautiful things" (*Art Education*, p. 1) Prof. Santayana says, "Æsthetic education consists in training ourselves to see the maximum of beauty". (*The Sense of Beauty*, p. 136) Another aspect of art is emphasized by Thompson when he says, "The biological importance of living in beautiful surroundings is inestimable". It makes for health of body and brain; it awakens long-dormant buds; it fills up the life with wholesome delights; it produces pleasant modifications of the individual; and who can tell how its potent message may travel by the wireless telegraphy of ante-natal life? (*Darwinism and Human Life* p. 229) Professor Münsterberg holds that "The belief in the absolute dignity of such true art must be instilled by education. As far as this ideal is realized in the world of things, we have the fine arts; as far as mankind and man's will is the material, we have literature; as far as the inner life comes to such perfect expression, we have lyrics and music. No education can live up to its true ends unless it helps throughout to stimulate the enthusiasm for artistic beauty. Whether poems or dramas are read, whether the masterpieces of foreign literature are brought near to the pupil, whether artistic drawing or singing are studied or the glory of historical art is proclaimed, the enthusiasm for the realm of beautiful art must be developed, together with the belief in truth and harmony." (*Psychology and Teacher*, p. 247.)

CHAPTER VII

THE ETHICAL ASPECTS OF EDUCATIONAL THEORY

1 THE MEANING AND DEFINITION OF ETHICS. In this chapter we are concerned with the meaning of ethics and its relations to educational theory. Ethics has been defined often as the science of right conduct. It is one of the normative sciences. We say it is normative for the reason that it sets up a standard or ideal. Ethics is not concerned alone with the facts and laws that govern our conduct, but it is interested in what constitutes good conduct. Ethics can be regarded from the descriptive aspect of the world also. From such an angle it is concerned with the description and explanation of the facts of conduct. But when we take into account ideals and purposes, values and standards, we have passed beyond the realm of mere description and explanation into the world of norms and appreciation.

2 ETHICS AND COMMON SENSE. Common sense does not clearly define the moral issues nor do the descriptive sciences. We must not stop with a mere description of conduct, but we must concern ourselves with the ideals which it is worthy for us to realize in conduct. The aim we have in view is deserving of our consideration. We must, therefore, not confine ethics to the realm of description and explanation, but must regard it as a branch of philosophy. Common sense no more can offer a sufficient basis for good conduct than it can offer a satisfactory basis for religion, art, or business. We must take a broader view of life and experience than that afforded by common sense, if we are to understand the deeper purposes of our life. It is just as essential that the principles of right conduct be clearly defined and the problems recognized as it is that our business in the economic world should be established on sound economic principles.

3 ETHICS AS A SCIENCE. Ethics is thus both a normative and a descriptive science. As a normative science it is concerned with what is, with the facts of experience and their causal or sequential relations. From the normative point of view, ethics is regarded as a science of values, purposes and ideals and the chief concern of ethics from this point of view is that of determining the worthy aims and purposes of life. Ethics is constantly in search of the highest good, and with the standards of right conduct, which conduct is measured in terms of this ideal. Ethics has always been regarded as a search for the highest good in life, but there have been a great many different answers given to the question, what is the highest good? We must now turn our attention to some of the broader relations of ethics in order that we may get a comprehensive view of the whole field of our human experience and of knowledge. We have noticed that metaphysics, epistemology, logic, religion, and æsthetics are very closely interwoven. It is our purpose here to show that ethics sustains a close relation to each of these branches of philosophy. Let us first concern ourselves with the relation between metaphysics and ethics.

4 THE RELATION OF METAPHYSICS AND ETHICS. We have stated already that the ideal of ethics is that of the highest good, and that this is the standard of our conduct. It would be meaningless and valueless to concern ourselves with the ideal of the good, if it had no reality or being. We must then concern ourselves with the question, what reality or worth has this ideal of the good? It would be a useless striving indeed if man were constantly in search of the ideal of the good and he should find in the end that it is not real, or has no true being. It would be like chasing a mere fancy. The metaphysician must inquire into the ideal of the good in order to determine its validity and its meaning, or reality in the universal system of human experience. It is, then, impossible completely to withdraw ethics from the field of metaphysics. To do so would mean great loss for ethics. Rogers says, "The Ethics of the 'moral sense' school is the least dependent on metaphysics, but this is not in its favor, being merely the result of superficiality." (*Short Hist. of Ethics*, p. 9.) With-

out the metaphysical criticism of the first principles of ethics, we might be engaged constantly in chasing butterflies instead of real ideals of worth. We must constantly criticize our ethical ideal in the light of the larger view of life as a whole. It will always be true that "The widest truths of ethics like those of other sciences, cannot fully be realized except by reference to other branches of philosophy." (Shelton: *Int. Jour. Eth.* 20:24:424) Rogers says, "It is a truth, which should never be forgotten, that a complete philosophy of ethics involves some very profound metaphysical problems." (*Short Hist. of Ethics*, p. 8) The close relation between ethics and metaphysics is expressed by Prof. R. B. Perry when he asserts that "There can be no such thing as a judgment of worth which is not a judgment concerning the fact or being of the worth." (*Int. Jour. Ethics* 21:295)

5 THE RELATION OF EPISTEMOLOGY AND ETHICS. What has been said with regard to the connections of ethics and metaphysics can almost be repeated in showing the relationship between ethics and epistemology. The ideal of the good must be knowable if it is to be of real value or worth at all. What would be gained if the ideal of ethics were real, and yet it could not be known? To know the reality of this ideal is to see it in its relation to the universal system of ideals and purposes, and such a relationship is possible only because knowledge is possible. The relationship itself would not exist were it not for knowledge. Indeed we mean nothing more by such a relationship, than that the part of our experience is viewed in the light of a larger knowledge of the whole. The common sense view of ethics, as we have observed already, does not regard this science as having fundamental connections with metaphysics and epistemology. We have seen also that the ethics of common sense does not gain anything by failing to perceive these fundamental relations; on the contrary, it must all be counted as a loss and discredit of the common sense view of ethics. The ideal of ethics, then, must be not only true and stand the test of reality, as proposed by metaphysics, but this ideal must be such that it may be known. We must conclude, therefore, with Professor

Adler, that "Ethical science has its Epistemological foundation."
(*Int. Journal of Ethics*, 22:5.)

6 THE RELATION OF ETHICS AND LOGIC. There are also close connections between ethics and logic and these have appeared already, so we need do little more than bring together a few of the statements that we have made in other connections. From the logical point of view, the truths in the field of ethics must conform to a wider system of truths. It is not a sufficient test of truth that a few of the facts fit harmoniously together. They must be viewed in their relation to a wider totality of things. So logic must enter the field of ethics in order to ascertain whether or not the standards and tests of truth are sufficient, and this is to be determined by their consistency with the universal system of knowledge. If the truths in one field of experience are seen to conflict with those of another the logician does not hesitate to regard some of the so-called truths as untrue. We must apply this logical test of truth no matter in what field of our experience we consider, and unless the several fields of experience qualify in their use of method they fail to meet the logical standards of truth. So we can sum up the three preceding sections of this chapter by asserting that the ideal of ethics as the standard of right conduct, that is the good, must not only be real, but it must be knowable and be true.

7 THE RELATION OF ETHICS AND RELIGION. In the chapter on the religious aspects of educational theory, we spoke of the connections between ethics and religion. We must here assert this same connection, this time from the point of view of ethics rather than from that of religion. Ethics owes quite as heavy a debt to religion as religion does to ethics. Ethics has borrowed the conception of reverence, devotion, and loyalty from religion, but with all the likenesses there are fundamental differences between ethics and religion. Ethics is concerned with the relationship between man and man, while religion is concerned with the relationships thus defined with the added notion of man's relation to his God. Professor Palmer rightly says that "We must fix our moral minds on the manward rather than on the goodward side of a life which unites

finite and infinite." (Palmer, *Field of Ethics*, p. 192.)

Ethics and religion are thus related as two concentric circles having unequal radii, the longer of which represents religion, and the one with the shorter radius that of ethics. Professor Peabody says well, that "To prolong the radius of goodness is to penetrate the sphere of faith. The outer edge of ethics is the inner margin of religion." (*App. to Soc. Ques.*, p. 179) Such a conception brings out clearly the notion that ethics and religion are inseparably connected. The value of a religion is to be determined very largely by its serviceableness with respect to man, as well as by reverence and obedience toward God. The ideal of ethics is that of goodness, and like the ideal of beauty it must be tested in the light of a complete view of the world. Ethics, religion, and æsthetics are thus all to be subjected to a philosophical criticism of life as a whole.

8 THE RELATION OF ETHICS AND ÆSTHETICS. In our discussion of the relation of ethics and æsthetics we have noted the close relationship that obtains between these two sciences. We have stated that ethics borrows its conception of unity and harmony from æsthetics. We have also noted that the ideal of æsthetics is realized as a concrete embodiment of human purpose, and as the object of æsthetic contemplation. Similarly we have noted that æsthetics, while holding to the same ideal of organic unity, fails to realize in any single act of experience this complete moment of perfection. Art idealizes the fragment of our experience by taking account of the principles of unity and harmony and thus makes possible the actual realization of the ideal of the artist. The moralist, however, is not able to point to any act of such complete unity. Yet the difference is not so great as it might seem, for while the moralist does not succeed in realizing completely his ideal in any act of experience; with his eyes steadily fixed on this unity of purpose, he governs his every act, and so it is possible to conceive of each act as contributing to the realization of a larger whole. Indeed this act of self-realization at times becomes so apparent through our deeds that we shift our point of view momentarily from that of the moralist to that of the æsthetician, and regard the individual act as the consummation and realization of our most complete meaning. The enjoyment

of the moralist often resembles that of the artist, but his product of art is embodied in the unity of his deeds and not in any concrete and objective unity. Instead of completing the picture of life in actual concrete embodiment, it must to a large extent be filled out in the mind of the moralist.

9 THE PROBLEMS OF ETHICS. The problems of ethics are special, not in the sense that they have no connection with the other problems of life, but in the sense that they require first to be attacked by the moral philosopher. Later they must be criticized in the light of general philosophy. The special problems of ethics are those relating to the ideal of the good, freedom, and the standards, or criteria, of conduct. As we have found in the other special fields, so we will find here that the solutions proposed by the different systems of ethics differ considerably. It may be, however, that they do not differ so widely as we think, for a man is psychologically predisposed to regard his adversaries as inconsistent, even before he really considers how far apart they really are. He usually excuses his own inconsistency by regarding his opponent as inconsistent.

10 SYSTEMS OF ETHICS. I am disposed to believe that all the great systems of ethics are more closely related than is often supposed, and yet I am keenly aware of the fact that there are important differences here. The chief difference is due probably to the fact that some of the systems are more completely thought out in their universal relations than are others. There are a number of important systems of philosophy which have concerned themselves with the problems of ethics. As a matter of fact, every system of philosophy has regarded as its chief task the search for the good, and such a search is defined as the central problem of ethical inquiry. No complete system of philosophy is possible which does not concern itself with the ideals of conduct, or the good. Some systems of philosophy are primarily concerned with metaphysics, some are distinctly epistemological, and others are more religious, æsthetic or ethical, but no matter from what angle we approach experience, we are certain to find the connections that have been referred to above. In the systems of philosophy

to which mention is made in the remaining portion of this chapter, I am concerned not with the metaphysical, epistemological, logical or æsthetic aspects, but rather with the ethical aspects. We are to keep in mind the close relationship that has already been defined as existing between these several disciplines. We shall refer to different forms of hedonism, stoicism, platonism, naturalism, pragmatism and idealism.

II THE ETHICS OF HEDONISM. According to the ethics of hedonism, pleasure is the only worthy end and motive of conduct. This ideal has been defined in a number of different ways by Cyrenaicism, Epicureanism, and utilitarianism. According to Aristipus, leader of the Cyrenaics, pleasure is regarded as the highest good, but since bodily pleasures are more intense it is this sort of pleasure that we should attempt to realize in conduct. Then since the bodily pains are also more intense than the mental, these are most to be avoided. According to Epicurus, however, pleasures of the mind are more lasting. They have greater durability and possess greater intensity, therefore pleasures of the intellect are to be regarded as the chief aim of conduct. According to utilitarianism as defined by the later hedonists, Bentham, Mill, and Spencer, pleasure is regarded as the object of the greatest utility, and consequently the highest aim of conduct. The Cyrenaics and the Epicureans were alike in that both regarded the highest aim of conduct as that of individual pleasure, but they differed in that Aristipus regarded the bodily pleasures as of chief importance, while Epicurus considered the pleasures of the mind as of the greatest value.

Hobbs and Locke of the modern hedonists were alike in that both regarded individual pleasures as the highest motives and aim of conduct, and both differed from the utilitarian school to which Bentham, Mill, and Spencer belong. These last three were universalistic hedonists. The highest aim, according to them was that of the "Greatest happiness to the greatest number." Mill asserted that there is a standard of pleasure to which all pleasure must conform. Pleasure not only had duration and intensity, that is quantity, but they had quality also. Mill asserted that it was better to be a Socrates dissatisfied than a pig satisfied. The introduction of this qualita-

tive distinction in pleasure virtually denied pleasure as the highest good in life. For if pleasures are not of the same value qualitatively considered, then there must be some standard outside of pleasure by which all pleasures are measured. This really was the death-knell of the pleasure theory of the highest good.

12 THE ETHICS OF STOICISM. The Stoics, like the Cyrenaics, were a branch of the Socratic school. They contended that not pleasure but duty and virtue are the highest aims of conduct. We are not to be good in order that we may get the greatest amount of pleasure out of life, as Epicurus said, but we are to be good because it is right. Virtue for virtue's sake was the doctrine of the Stoics. This necessarily led to formalism, the chief results of which were to be found in the philosophy of the schoolmen during the medieval ages. According to the Stoics the highest good consisted in conforming to law. Man's greatest moral duty was to govern his conduct in such a way as to conform to the laws of nature or the universe. The Stoics were necessarists or determinists in ethics. They regarded it man's highest duty to conform rigidly to the laws of the universe. Here the Stoics, like a good many of us to-day, mistook the means for the end. It is not that we should conform to the laws of nature with no ulterior aim in view, but rather we must conform to these laws in order that we may be able to obtain the greatest good in life. Zeno, the leader of the Stoics, maintained that the way to know our duty is to know the secret laws of nature, and it is only by conforming to these laws that man can obtain the highest good in life. Indeed there was no good beyond mere conformance with this law. There was an ascetic element in this philosophy, such as we have noticed in Platonism. This ascetic element gained its high-water mark during the period of scholasticism. The Stoics, believing that the hedonists were on the wrong track entirely in their search for the highest good, went to the opposite extreme, and instead of laying emphasis on the content side of experience, they overemphasized the form.

13 THE ETHICS OF PLATONISM. Enough has been said

already with regard to the ethical aspects of Plato's philosophy to suggest what, according to his view, was the highest good. Plato conceived that all ideas resolved themselves ultimately into one supreme ideal which is called the idea of the good. This idea of the good was by Plato regarded as the supreme motive and end of all good conduct. It was man's highest obligation to strive to gain a clear conception of this idea of the good. It was possible to get this conception only by clear philosophical thinking. The idea of the good according to Plato was of such a character that only the philosophers, and those most highly learned, could attain. Thus the ideal of ethical conduct was rather exclusive in the mind of Plato. It was only the philosopher who could see the real worth and value of conduct. Morality thus became a matter too largely of scholarship to serve as a satisfactory basis for universal morality. The best that the artisans and laborers could attain was to attend strictly to their own business. Every man received his just dues by correlating properly the principles of courage, wisdom, and temperance. But the virtue of wisdom was withheld largely from the lower class. All individuals, however, could practice the virtue of temperance, and the warriors at least could practice the virtue of courage. Justice was not a fourth virtue, but rather the union of the virtues of courage, temperance, and wisdom.

The highest good according to this philosophy was removed from experience, and this was its great defect. In whatever terms the good may be defined, it must always attribute some value to the experience of this world, otherwise the good is unrealizable and we can do no more than contemplate it in a mystical way. This is important for us to consider for the reason that a complete educational theory, which we are here attempting to give in general outline, must always be presented in the light of a complete philosophy of life, which contains a statement of the ultimate or highest good. We cannot accept as final the highest good as stated by Plato. It consisted too largely in abstraction from the world of experience, rather than in a statement of a completed and rounded-out experience, such as we know something about from our partial life in the world of causal sequence.

14 THE ETHICS OF NATURALISM. When we spoke of the religious aspects of naturalism, we noted that very little contribution to religious philosophy has been made by this theory of life. It is different, however, when we view the matter from the point of view of ethics. Naturalism as an ethical theory asserts the highest good to be found in the realization of pleasure, or some other content of this life. In this respect it will be noticed that it differs widely from Platonism, which found the chief good in a world above the world of our practical experience. Naturalism is really a science rather than a philosophy. It does, however, have some philosophical connections. The conclusions arrived at by naturalism with regard to the nature of the universe raise certain important philosophical questions which cannot be passed by unnoticed. Naturalism, true to its name, finds the highest good in some factor of the natural life of man. As we have said, this is expressed usually in terms of pleasure. A naturalistic, or positivistic, philosophy is the logical background for utilitarian ethics. According to Spencer, chief of the naturalistic ethical philosophers, the highest good consisted in happiness. Not the happiness of the moment or of the individual, but the greatest happiness to the greatest number. This view regards the only motive and the only worthy end of conduct to be some form of pleasure or, better, happiness. Since the aim of life is some good to be realized in the life of our present experience, this type of ethical theory is generally regarded as utilitarian. The good is of some service to man in his present state of existence. It is not something to be striven for that belongs to another world, but rather something to be obtained in this world of our partial experience. In this view, the utilitarian philosopher is doubtless more accurate than was Plato, and yet, whether or not such a good can be regarded as final, is a question to which our attention will need to be drawn further as we proceed.

15 THE ETHICS OF PRAGMATISM. While pragmatism has not yet developed a complete ethical theory, but is primarily epistemological, there are, however, certain influences that can be deduced logically from its fundamental principles. The test of the truth of any hypothesis is that of verification, ac-

cording to pragmatism. It is not different in the case of religious or moral hypotheses. I may regard as the highest good that which is found to work most satisfactorily in my life. This is the pragmatic test of all truth. Pragmatism does not formulate in any definite way its conception of the highest good, but so far it has stated only the test of the ultimate truth and validity of such a conception. This theory is too young to be considered at any great length in this place. It has not well formulated its own theories of the universe, and it need not, therefore, be criticized to any great extent here. There are certain epistemological implications of this doctrine that have wider significance for educational theory, but it is difficult to formulate these for the reason that the doctrine is itself not very clearly formulated.

16 THE ETHICS OF IDEALISM. According to the idealistic view which is maintained here, the highest good of life consists in self-realization. Self-realization is possible only through the realization of our own deepest will and purpose. The ultimate reality of the universe is stated in terms of personality. It is the development of this personality through self-realization that constitutes the highest good in the individual, and when he strives for ideal values that are not narrowly personal, but over-individual, his strivings cease to be of a selfish, egoistic nature, and come to be universal. The attempts to realize such over-individual or super-personal ideals, which are valuable for every individual is the highest motive and the chief end of all conduct. There is no way of formulating specifically the chief end of conduct except in terms of self-realization. It thus becomes the duty of every individual to attempt to realize the ideal values of life, truth, beauty, goodness, and religion, for these are values which express the deepest and most abiding reality of life. They are both personal and super-personal, both individual and over-individual, or universal. They have their value not in the fact that individuals strive for their realization to satisfy certain narrow purposes, but rather because their nature is of the very essence of reality or life itself.

According to the ethics of idealism, then, the highest good does not consist in the pleasure either of the individual, or

the greatest number of individuals, nor does it consist in the formal adherence to the super-personal laws of nature; nor does it consist in the contemplation of the idea of the good, which idea is removed from the world of practical experience; nor yet is it found in the ethics of pragmatism, which asserts that the highest good consists in the practical adaptation of our hypotheses and theories to the facts of our experience. All of these grand philosophies give us an ethical view of the world which we cannot afford to neglect with impunity, but they fail to give us a complete and systematic account of the ultimate good or chief value of life. This is due probably to the fact that the wider philosophy of which these different ethical reflections are only a small part is insufficient to give an account of the universe as a whole.

The good must always be conceived in terms of personality. The reality of the universe is expressible in no other terms than those of personality and will. The highest good in life consists in the most complete development and realization of our own inner purposes, interests, or will. H. C. King says: "Not feelings, not sentiments, moral sensibilities, or aspirations, not principles, not good resolutions, even but only action, born of the will truly reveals us." (*Rational Living*, p. 145.) "Whenever we tap organic nature," said Romanes, "it seems to flow with purpose." (Quoted by Thompson, *Darwinism and Human Life*, p. 196.) Münsterberg says: "In the purposive view of our real life, only our will and our personality have a meaning and can be related to the ideas and higher aims." (*Psychotherapy*, p. 145.)

17 SUMMARY. In summarizing briefly the contents of this chapter let us say that ethical theory is a part of a larger theory of life, just as are æsthetics and religion. Ethics must be viewed, therefore, always in its relation to the whole philosophy of life. It is not an independent science in the sense that it has no connection with other views of life. It is bound up intimately with metaphysics, epistemology, religion, logic and æsthetics. The ideal of the good, therefore, cannot be detached completely from the ideals of truth, beauty, and religion.

The different systems of philosophy give different answers to

the question as to what constitutes the ultimate good of conduct. Each one of these philosophies makes some important contributions to the conception of the value and meaning of life as a whole. They do not, however, all offer an equally satisfactory solution of the problems which they set out to solve. The answers given by some of these philosophers are indeed very partial and fragmentary, and yet the chief conclusions of them all must be incorporated in the larger conception of the good. The hedonist is right in maintaining that pleasure is an important element of the universe. The Stoic is right in his conception of the good as involving duty, loyalty, and strict adherence to ideals. He was mistaken, however, in asserting that the highest ideal of conduct is living in strict accordance with the laws of the universe. This is to be regarded as a means, and not as an end in itself. Plato was right in his contentions that the idea of the good deserves our deepest loyalty and adoration. Our duty to this ideal is indeed so great that it becomes almost a matter of religion that we show our loyalty to it.

Idealism takes account of all of these answers that have been offered to the questions of ethics. It does not regard any one of them, however, or all of them put together as offering a final or satisfactory solution of the great ethical problems of life. The idealist cannot see the ultimate values of the world defined in materialistic terms, nor can he see these defined as pleasure, or happiness, or strict conformity to physical law. These things are external to man and consequently are outside the boundaries of the real man. Man's deepest reality is expressed in terms of will or personality, and the highest good must be conceived in such terms. The great problem of ethics is to conceive how it is possible for man to develop to the highest possible degree his own inner meaning and purpose. This he can do only by adhering strictly to the ideal values of life, which are not expressed in terms extra-personal, but which fall within the range of his own deepest will. These ideals we have expressed as truth, beauty, goodness, and religion. We have even gone so far as to suggest that these ideals have their final unity in the development of our own personality. It is only by loyalty and devotion to these ideals that man's inner purpose or will develops.

18 EDUCATIONAL IMPLICATIONS OF ETHICS. We are now in a position to see something of the ethical implications of the ethics of voluntaristic idealism. I speak of voluntaristic idealism in order to distinguish it from another type of idealism in which the chief emphasis is placed upon the intellect, rather than on the will. According to the philosophy which forms the background to the educational theory herein expressed, the chief reality of life is defined in terms of will, or will directed toward a purpose, which I call personality. It is not difficult to see, then, what significance this sort of a philosophy has for educational theory. The chief aim of education, as well as of every other institution and every vocation, is to realize these ideal values. The school is an institution of society, the chief business of which is to aid in the development of the personality of immature individuals. In other words, self-realization is the chief aim of education as well as the chief aim of life, and briefly it is the business of the school to aid individuals in this larger realization of their own life interests and purposes.

CHAPTER VIII

RETROSPECT AND PROSPECT

I THE SCIENTIFIC AND PHILOSOPHICAL ASPECTS OF LIFE. In Part I of this volume we concerned ourselves with the aims, scope, methods, and relations of the descriptive sciences. In Part II we gave our attention to the aims, scope, methods, and relations of philosophy. In Part III we made certain sharper comparisons and contrasts between science and philosophy from the several different aspects of philosophy. We concluded this part with the statement that the descriptive sciences cannot offer us a complete view of life. The descriptive sciences are concerned with the formulation of the laws and principles that govern the facts of our experience in a causal order or sequence.

The chief aim of science is to render an accurate and complete account of our experience from the point of view of their eternal connections in a time and space order of things. This sort of a formulation of our experience leaves out of account man's will and purpose. The deeper cravings of the human soul are not touched or disturbed by correlating thus our experiences for the purpose of explanation. Indeed such an explanation in terms of causal relationship is in itself a direct outgrowth of the deepest demands of our will and purpose. Yet there are those who do not see this point clearly and regard science as capable of offering a complete and accurate account of life as a whole. Our own conclusion with regard to this matter, however, was very different. Professor Münsterberg says: "It is one of the greatest dangers of our time that the naturalistic point of view which decomposes the world into elements for the purpose of causal connection, interferes with the volitional point of view of the real life, which can deal only with values and not with elements." Professor Horne says: "We need to-day a popular philosophy that shows how

the mechanism of science is itself a product of the free inquiring spirit of man. To me it is a sad spectacle to see keenly intelligent men throwing themselves as a mass of mere matter before the Juggernaut of scientific necessity which they themselves have constructed." (*Phil. of Edu.*, p. XII.)

We regarded it the business of philosophy to give a statement of the final meaning and reality of life and the deepest cravings of the human soul. The scientific aspect of the world is necessary, indeed without it our world would fall back on the plane of savagery. But we must be careful that we do not make the barbarous blunder of confusing aims and means, or causal connection and interpretation. The world of science is the world of connection, the world of causal relationship, and such a world is the result of the demands of our own will. The world viewed from the philosophical aspect does not thus disregard our will and its purposes. Indeed it considers that it is the will that is deserving of the chief place in our experience, and in terms of which the ultimate reality of the universe is explained. The explanation of the descriptive scientist, then, is not complete. The world stands as a mere connection in a time and space order, so long as we view it strictly from the scientific aspect. It is plain, then, that there are two aspects of our life. The one is that considered by science, the other by philosophy. A complete theory of life cannot afford to leave out of account either one of these aspects of our experience. Science considers man in relation to the order of time and space. Philosophy conceives man in his relation to the universe as a whole, which is not confined within the limits of time and space, but which, on the contrary, includes time and space within its own being.

From this view we deduce easily the conclusion that no complete and satisfactory account of our educational experience can be given from the point of view of the descriptive sciences alone. We need this knowledge and understanding of the connections of the world's phenomena, but we need also something more than it is possible for the scientist to give, that is, we need purposes, ideals, and values. We need appreciation as well as description. We need to be able to interpret our experience in the light of its relation to the whole of which each experience is but a fragment. The world of philosophy is the

world of interpretation and appreciation, the world of science is that of description and of explanation. From the point of view of life as a whole, philosophy is concerned with the aims, purposes, and values of our experience, while science is interested in this experience in its causal connection. Philosophy thus gives us the meaning and value of life, while the descriptive sciences provide us with the means and the methods for the realization of these ideal values and purposes.

2 THE SCIENTIFIC AND PHILOSOPHICAL ASPECTS OF EDUCATIONAL THEORY. At this point in our inquiry we paused to regard education as a limited portion of our experience, and consequently falling within the bounds of the universal experience. It was then necessary to regard the theory of education in the light of a larger theory of life. Education being only a part of life as a whole, the philosophy of education is a part of the wider philosophy of life, and the same can be said with respect to education when viewed from the aspect of descriptive science. We are, therefore, to find the aims of education in the broader field of the aims of life. And science will be of service to us only in so far as it makes the realization of our purposes in life possible. The philosophical aspect of education, therefore, is found to be concerned with the aims and purpose of education, with the meaning and values of our educational experience. The scientific aspect of education concerns itself with the means and methods by which we realize our ideal values in life.

3 THE SPECIAL PHILOSOPHICAL ASPECTS OF EDUCATIONAL THEORY. Then we considered the special disciplines of philosophy, one by one, showing their relations to educational theory. Philosophy was considered in a general way, as providing the aims, purposes, and values of life until we reached Part IV. There we began to divide the field into the several divisions of metaphysics, epistemology, logic, religion, æsthetics, and ethics. We found that metaphysics concerns itself with the reality and being of all experience, and that each fragment of our experience raises questions of ultimate reality. We therefore found it impossible to sever education from its metaphysical and epistemological bases without

destroying the meaning of educational experience altogether. We considered educational experience in the light of epistemological reflection and concluded that all reality must be knowable, otherwise it would be meaningless to us. Thus we asserted the metaphysical and the epistemological bases of educational experience.

4 **ETHICS AND THE EDUCATIONAL IDEAL.** We concerned ourselves with the normative science of logic, philosophy of religion, æsthetics, and ethics. We found that logic concerns itself with the ideals and values of truth; that religion has certain values of ultimate truth and reality of its own; that æsthetics concerns itself with the ideals of beauty; and that ethics concerns itself with ideals of goodness. Now that we are about to complete the survey of the relations of education to the special branches of philosophy, or the normative sciences, we must state that the ideal of ethics, since it must fall within the larger ideal of life or experience as a whole, must not neglect the truths and values already brought to light and shown to form a necessary part of the ultimate nature of the universe.

Education, then, must realize the ideal values of truth, beauty, goodness, and religion. This is the aim of life as a whole, and it is the business of education to prepare for life as a whole. There can be no higher aim of education than that of striving to realize these eternal values. They are not to be conceived of as separate and isolated realms of value, but must be considered in their organic unity. There are two ways of expressing this organic unity, accordingly as they take the point of view of the individual, or of society as a collection of individuals. In the former case we regard the life of self-realization as the highest expression of this organic unity of the eternal values of life. When we view their unity from the side of society, progress or social welfare comes to be regarded as the highest ideal of life. We have already stated that in our judgment self-realization is the proper expression of the interrelation and organic unity of these ideals, or eternal values.

PART V

EDUCATIONAL IMPLICATION OF THE ETHICS OF VOLUNTARISTIC IDEALISM

CHAPTER I

ETHICS AS THE SEARCH FOR THE HIGHEST GOOD

1 PRE-SOCRATIC PHILOSOPHY. In order to get properly before our minds the place of ethics in life and in education, let us make a brief survey of the history of ethics. The philosophy preceding Socrates gave little or no attention to the ethical aspects of life. The chief concern of the philosophy of the pre-Socratic period was the origin and nature of the universe. The speculations of this period were cosmological rather than ethical. The interest was in the universe rather than in man. The attempt was to find some first principle to which all things else could be reduced. It is natural that under such conditions no great advance should be made in the field of ethics. The search was not for an ethical principle of the highest good, but rather for a first principle of all reality. The interest was metaphysical rather than ethical. It is not intended that this period be regarded as having no value for ethics, and yet it is to be understood that the chief interest of man centered in the world about him rather than in his own life. Instead of asking such questions as What is the highest good? and What should man strive to realize as his chief aim in life? the questions related to the nature and origin of the world about him.

2 POST-SOCRATIC PHILOSOPHY. With Socrates, however, the scene changes. The interest drifted from the universe to man. The change in point of view brought about by Socrates' ethical inquiries closely resembled that brought about by Copernicus in astronomy. According to Ptolemy the earth was the center of the universe and all the other heavenly bodies revolved about this as a center. But according to Copernicus the sun is the center of the universe, and about it all heavenly bodies rotate. According to the pre-Socratic philosophy the

central problems of the universe lay in the search for the first principle of all existence. With the coming of Socrates, however, the chief problem of philosophy lay in the search for the highest good, and this highest good was to be found in some aspect of man's own nature. The problem came to concern itself more vitally with man and less so with the universe of the material order.

What has been said of Socrates was also true of the other great systematic philosophers of the Periclean age, Plato and Aristotle. It was only in deference to the popular notion of things that Plato even condescended to give any consideration whatsoever to the material universe. In his Dialogues he gives but one discourse on the nature of the universe, in the *Timæus*. With Aristotle the chief interest was also in man. I believe that it is true to-day that we are more vitally concerned with man than with the universe about man, or perhaps I should say we are now seeking the first and vital principle of all existence in the nature of man himself, rather than in the physical universe, in the sequential order of time and space.

3 THE MEANING AND VALUE OF EXPERIENCE. What has been said above simply brings out more clearly that since the time of Socrates the philosopher has been engaged primarily in the attempt to define the meaning and value of all of our human experience. His speculations are concerning the facts of our experience. This he uses as his starting point instead of looking for the origin of the universe. Indeed he has come often to the conclusion that the real order and nature of the universe is something not independent of man, but rather to be found in man's own inner nature. Idealism finds this first principle of all existence in the purpose of man himself. The ultimate reality of the universe is purpose or will. The physical speculations of the pre-Socratic philosophy did not come to the position where they could see such a principle as the essence of all reality. The idealist regards man not as something extraneous and accidental in the world of reality, but rather he regards the will and purpose of man as an organic part of the great will and personality of the universe, the absolute. Man's highest obligation to himself and to the universe thus consists in the striving to realize the innermost

meaning of this will.

Unlike the pre-Socratic philosopher, the idealist starts with the facts and laws of our own experience, and passes beyond these by a process of logical inference to their ultimate meaning and significance, in their relation to the universe as parts to the whole. The idealist finds every fragment of our experience to have meaning and value, contrary to the popular notion of idealism which seems to regard it as an absolute denial of the reality of all experience. The idealist begins with the fragmentary world of experience in which he lives. He begins with facts but he does not end with facts alone, nor is he satisfied with the world of mere connection, a world of law. He passes beyond facts and laws to their ultimate significance, or meaning and value. The meaning and value of our fragmentary experience are not to be revealed simply by asserting their external connections as phenomena in a causal system. On the contrary, the reality of each fragment of our experience is to be determined by its integral and organic relation to the whole. Each part suggests the whole, and it is by exercising our rational and reflective powers that we are able to see the meaning of the whole in each part of this experience.

4 **FACTS AND PURPOSES IN LIFE.** The reality of the universe is, then, according to modern idealism, to be found in experience itself and not beyond experience in an eternal world that is separated entirely from this present mundane world of ours, as Plato would say. Man's highest duty, therefore, does not consist in the contemplation of such a super-mundane reality as that of the Platonic idea of the good. On the contrary, man finds the reality of the universe suggested in his own experience, fragmentary and temporal though it be. No one of these facts, or all of them in a causal order, such as is determined by descriptive sciences, will ever give us the real nature of the universe or the meaning of our experience. It is only through the process of rational reflection and logical inference that we pass from facts and laws to their meaning and significance for life as a whole. The great problem of philosophy, then, according to idealism, is that of finding the whole in each part, or in other words, finding the relation that necessarily obtains between facts and the meaning of life as a whole.

Logically conceived the universe can have existence only when it is self-contained and self-maintained. We cannot think of existence without conceiving of organic unity. That is self-sufficient and beyond which no other is needed for its completion. Our facts in this world of experience gain significance and meaning only by reference to this universal whole, or organic unity of all experience.

Ethically considered the chief problem of the worldth consists in regarding each act of our experience as the part of the larger reality of the universe. Man is to regard his life not as a series of facts, or even as a causally related system of facts, but rather he is to consider each fact in the light of the whole. It is only in this way that each act or deed of man comes to have any abiding significance or meaning for ultimate reality. A deeper inquiry into the real nature of man reveals his innermost reality as definable in terms of purpose and ideals. Man lives not by bread alone, but by ideals also. There are certain cravings of the will that can be satisfied only by the attachment of each fragment or deed to a larger system of purposive reality. Philosophy has, then, come to be a search for the meaning and value of human experience. Ethics is a search for the highest good in life. It is not detached from the broader inquiries of philosophy, as we have seen already, but rather its limits are defined by the meaning and reality of life.

5 THE DESCRIPTIVE AND NORMATIVE ASPECTS. It ought to be clear by this time that ethics views men not as mere phenomena, connected in a sequential order, but rather regards them as purposive and willing beings. The attitude of the descriptive sciences never can displace the deeper attitude taken by the moral philosopher. From the descriptive point of view, as well as the historical, man's acts are simply recorded and their connection pointed out as law. Ethics, on the contrary, views man as a purposive and willing being, expressing his inner nature and reality in the deed. There is need of both attitudes in the life of man. They are probably equally important points of view. The philosopher can no more disregard the results of the descriptive sciences than the descriptive scientist can afford to neglect the fact of experience. Indeed the philosopher, as we have seen, begins where the scientist leaves

off. Science and philosophy ought to be of mutual help in their inquiries concerning the life of man, but these points of view must not be confused. Ethics is always concerned with the purpose and value of life, while the descriptive sciences never raise questions as to meaning, purpose, or value.

We shall see later that much confusion has come about in life, and more particularly in education, because of our failure to keep clearly in mind the distinction between the normative and descriptive aspects of life. The normative view of life is concerned with our ideals and purposes, with our will attitudes, our deeper meanings. The descriptive sciences are concerned with the facts of our experience and their external connections. Ethics provides us with the aims and purposes of life, the descriptive sciences with the means and methods at our disposal for realizing these aims and values.

6 THE IDEAL VALUES OF LIFE. We have asserted already as a result of our special inquiries into the various philosophical discipline, that these ideal values of life are truth, beauty, goodness, and religion. These are counted absolute values for no other reason than that they represent the most complete satisfaction of human life, and the innermost craving of our will. We found that in order to ascertain the true value and the deeper meaning of life, it was necessary to divide our inquiry into the fields of logic, æsthetics, ethics, and religion. Through their separate inquiries we have arrived at the four sets of values thus defined. These are called ideal values for the reason that they satisfy not only the individual's will and purposes, but they satisfy the deeper interests and cravings of life. There is nothing narrowly individualistic about such values as truth, beauty, goodness, and religion. These are not my values alone, neither are they yours alone. They are both mine and yours, they belong to the universe. They represent the innermost nature of the universe. I do not mean to suggest that there are not other values more strictly individualistic than these from a narrower point of view, but I do mean to assert that it is not the only purpose of ethics to determine the narrower values. These ideal values, as we shall call them, are good not because they satisfy my own will alone, but because they satisfy all wills when their real natures are deter-

mined.

If my own purposes and will in life thwarts yours, then there is something wrong somewhere. Either I am going beyond my limits or you are going beyond yours. There is no way of telling whose view is right except from the larger point of view of the universal whole, in other words, the conception of the organic unity and relation of our acts not only to each other but to the whole of which they are a part. Every satisfaction of the human will or purpose is a good, but not necessarily the highest good. The good that tends to realize my purpose in life while interfering with yours may be said to be good for me but not good for you from the commonsense point of view. But we have seen already that common sense does not make any distinguished record for clear thinking. And so this judgment of common sense now before us needs consideration. Is it true that a thing may be good for you and not good for me? Yes, in a certain sense this is true, for as we have noted any satisfaction of my will, or anything that promotes the realization of my purpose in life, is a good. But we have also restored this statement to its proper balance by asserting that a purely individual good is not the highest good. Professor R. B. Perry well says that "If your action fulfills your interest and thwarts mine, it is again mixed, both good and bad. In order to define the good act in the premises it is necessary, as in the previous case, to define a purpose which shall embrace both interests and regulate action with a view to their joint fulfillment." (*The Moral Economy*, p. 267.) Indeed it is really a myth and not in the deepest sense our good at all.

When we gain a clear conception of the organic unity of life we cease to regard that thing which we call a purely individual good in any real sense at all. Individual good, then, in any narrow sense must be ruled out of account. There are goods of such a character that they are good for everybody. There are values which are not strictly personal, neither mine nor yours, but both mine and yours. The wider the circle of individuals included in such a consideration of values, the greater the value of the good concerned. We have posited the ideal values of truth, beauty, goodness, and religion, as those over-individual or super-personal values which belong to the universe as a whole, and by virtue of their relation to this ulti-

mate reality, this organic unity of life, they belong to me and to you, for we are essential attributes of the universal whole of reality by virtue of the fact that we possess a will. A man cannot be narrowly individualistic so long as he is serving these ideal values of life. There is a little danger that he will be denounced by his friends as egoistic. These values are individual, to be sure, but I would call them over-individual, or super-personal because they represent not a set of values for any one individual, but systems of values that are worthy of all individuals, without regard to the individual, or the race. Real values know no distinction whatsoever between persons.

This thought of the universal validity of these ideal values must not be lost sight of, for it will occupy the central portion of the remainder of this volume. Indeed it has been regarded up to the present as the central thought of the book. The matter will not be different when we come to consider in greater detail the aims and values of our educational experience.

7 THE GOOD AS WILL OR PURPOSE. We have defined the highest good in life in terms of purpose or will. The highest good is not expressed in terms of our own individual will, but rather in the over-individual will which gives meaning and value to our own personal wills. The universal will we have called the absolute, and it represents the organic unity of all individual wills. The highest good, then, can be expressed in no terms that fail to regard the absolute will. The satisfaction of my own personal will is good and desirable only in so far as this will is in harmony with the universal will of the absolute. Protagoras was wrong, then, when he said that each man is the measure of his own opinion and of his own value. Man's value is to be determined rather by his relation to the whole, to the absolute. It is only when my purpose and will are harmonized with the deeper purpose or meaning of the universe that I can be said to be morally good. The highest obligation enjoined upon me by universalistic ethics is that of seeking and striving to conform to the universal will. But in so doing I am not simply bowing to the authority of an individual or mechanical law, and there is no particular good to be derived from such conformity to external law, as the

Stoics would have us believe. On the contrary, my own deepest will and purpose can be seen only when it is viewed in the light of the universal whole, or the absolute experience. In this search to conform our own will to the will of the universe, I am simply striving to ascertain my own inner meaning and purpose, the essence of my own will, which is to be found only in its relation to the whole, or absolute will. Man's moral task does not consist in blind conformance with some authority or law with which he has no personal concern. On the contrary, man realizes and satisfies the deepest and most abiding cravings of his life in this search for the connections between his own will and the will of the absolute, in other words, man is his truest self only when he attempts to view the meaning of his fragmentary experience, as an expression of his will, in its relation to the universal experience of the absolute.

Man has both temporal and eternal aspects of his nature. His acts and his deeds are discharged in a world of time and space, a world of causal relationship, of external connection. Again he lives in a world of purposes, ideals, meaning and eternal reality, in other words in a world which is not limited by time and space. A universal experience, or what Royce calls a conspectus of all experience, such as the absolute experience, knows no such boundaries as time and space. Time and space are included within the absolute experience, and do not include such experience. But with us individuals whose experiences are limited the case is from one point of view different. Viewed from the aspects of separate individuals, our experience is limited in time and space, but viewed from the aspect of our purposes and will, we are integral parts of the universal will and know no such limitations as those defined by the time and space world of causal connection.

Man is not alone controlled by sequential causation. There is ideal causal, or what Professor Palmer calls anti-sequential causation. Man is drawn toward his ideals from above, as well as operated like the material aspects of his nature by sequential causation from behind. Man thus has the power of self-direction, is free. That is, he can decide upon his own purposes in life, and what purpose he chooses is a matter of very vital concern. Man is obliged to select between the various alternative possibilities of action. All possibilities do not

offer an equal opportunity for the realization of man's innermost nature; therefore, all choices and all actions are not of equal value. Ethically viewed, man must choose the act which is conducive to the largest degree of self-realization. Not self-realization from the narrower point of view, but such a self-realization as promotes the realization of the ideal values of life.

8 THE INDIVIDUAL AND SOCIAL ASPECTS OF THIS AIM. The highest aim of life when rightly conceived has been defined as self-realization. In this section we must restate what is meant by self-realization, and consider some objections which have been offered against it. We must also point out more clearly the individual and the social aspect of this aim, for we are to make use of this same aim in education, and are to assert it as the only satisfactory aim of education. By self-realization is meant the development or realization of the inner purposes of the individual. Self-realization is not possible unless the individual expresses his deeper purpose and meaning in his act or deeds. Each individual's experience thus reveals, when viewed in its relation to the whole, his own inner purpose and meaning, and this defines for him what his life ought to be, or what he should attempt to realize through his experience.

It would be meaningless to assert that the individual's highest aim is to realize something which is beyond himself and has no connection with his own real self, or his will. This something for which he is striving and which he considers the highest good, must have some meaning for him and some definite relation to his own will or purpose, otherwise there is no motive for action. If the good to be realized is something entirely apart from the individual, then the individual sees no value in such good. In fact he sees the absurdity of regarding it as a good at all. The good for which we are all striving must have some relation to our own individual self, otherwise it is meaningless and valueless, and consequently is no good at all. This is a very different thing from asserting that each individual should be the measure of his own opinion, or the ultimate standard of his own conduct. In fact thorough-going reflection on the meaning of our experience, as this is perceived

in its relation to the whole, shows very clearly that the universal good for which we are striving is actually realized in part in our own acts. But this good is realized by each individual in his own way. The good then can never be regarded as something extra-personal, but rather over-personal. That is to say, a person is not to regard as good something which has no connection with his own life, and the meaning of his own experience, but rather that which he regards as the highest good must be the most complete satisfaction of his own deepest will demands. And such a will demands a good that is not alone personal. Indeed the universality of such a good makes its personal value all the greater. That which is good for me alone is not very good. But that which is good for me and for everybody else is of much greater good, it is a universal good, and being universal it has greater value for each individual and greater meaning in total system of reality.

When we regard will or purpose as the chief good in life there are two aspects from which we may view this ideal. We may consider it from the point of view of a strictly individual will or from the point of view of the whole system or organic unity of wills. We have already noticed the insufficiency of the former narrow individualistic point of view. When we speak of the highest will or purpose being attainable through self-realization, we are not to be understood as referring to self-realization in any narrow sense, for we have asserted already that self-realization as the expression of our deepest will, is possible only through loyal adherence to the ideal values of life. Such a view of self-realization cannot be regarded as egoistic. It has often been denounced as such, however, but only by those who do not understand the self-realization theory. A closer analysis of this concept of self-realization as the highest expression of the good will reveals not only its individualistic or personal attributes, but its universal significance as well. The system of purposes and ideal values to which I am to devote my life are not to be regarded as my own values merely, but values which while they satisfy my own deepest will demands are also worthy to be posited as the chief value of all life. We are further to be reminded that self-realization is possible only through the realization of these ideal values, truth, beauty, goodness and religion. Self-realiza-

tion is not a fifth set of values, but rather it is a systematic unity and organization of all values. It is the expression of the life that is loyally devoted to the ideal values. Some have argued that instead of laying the stress on the individual, we should place it on society. Instead, therefore, of making self-realization the aim we should regard social welfare, or social progress the chief aim of life. The reason I personally believe that social welfare does not properly express the highest ideal of life is because it removes from the individual the ideal of self-responsibility to too large a degree. In a world of will and purpose, things are not to be taken lightly, but as expressions of attitude. The individual must order, govern and control his own experience by reference to an ideal which lies directly in his own pathway, but which ideal can be seen from the points of view of other men also. Self-realization through the appropriation of the ideal values of life makes definite and specific the end to be attained, and if such an end is attained you have no occasion to fear that society will degenerate. Social progress is conditioned by the degree to which each individual realizes his larger and better self. We cannot raise the level or standard of society except in so far as we raise the standards of individuals. Society cannot be lifted to a higher elevation as a unit, nor by the personality or force of any great social leader. Society may use such devices and personalities in the direction of a larger self-realization on the part of each individual but to lift society as a whole without regard to the individual unit is an impossibility. On the other hand, if the individual unit succeeds in a higher degree of self-realization, society must improve as a necessary consequence, and social welfare would be assured. I regard, therefore, social welfare as a necessary consequence of self-realization and not as a necessary condition thereto. There is mutual interdependence between social welfare or human progress and individual self-realization but the fundamental prerequisite of all progress is that of individual advancement, and individuals advance in proportion to the degree that they realize their own inner being and reality through the service of ideal values of life, which ideal values are not alone individual, but social in as much as they have universal application.

9 SELF-REALIZATION AS THE ULTIMATE GOAL. Self-realization is thus regarded not only as the chief aim, or *summum bonum*, or highest good of life, but it is to be regarded as the chief motive of all human conduct. The motive that expresses the innermost nature and harmony of man's will is that idea which compels him in the direction of his highest self-realization through obedient service, not to any mythical society, but to the actual and ideal values of life in the individual which are the completion of his fragmentary experience. Self-realization is not only an ideal toward which we strive but it is the chief motive that prompts our actions in our most moral and religious moments.

Instead of defining the highest good of life as that of pleasure, duty, virtue, happiness or social welfare, we have defined it as the most complete self-realization of the individual, and have asserted that such self-realization is possible only through the service of the ideal values of life, which are the deepest expressions of our own inner purpose. With such self-realization, pleasure, happiness, duty and social welfare, all have their places. They come as natural consequences, however, rather than as antecedents in a truly purposive life. There is no pleasure conceivable that can equal that resulting from the harmonization of the purpose and will of an individual will with all other individual wills, and with the universal, or absolute will. Royce well says that "Happiness involves the satisfaction of desires. Your natural desires are countless and conflicting. What satisfies one desire defeats another, until your desires are harmonized by means of some definite plan of life. Happiness is therefore a mere accident. Now it comes and now it flies, you know not why. And the mere plan to be happy is by itself no plan. You therefore cannot adopt the pursuit of happiness as your profession." (*Philosophy of Loyalty*, p. 81.)

Such an organization of purposes is possible, it is real, and furthermore it is ethically enjoined upon us to govern our lives in accordance with such a plan. Man cannot realize his highest self unless he devotes himself to values and purposes which are not narrowly individual. Complete self-realization is possible only when we regard the self to be realized as a part of a larger organization of purposes and wills. If my

own self-realization is such as to disregard your equally worthy rights and purposes, then I have not succeeded in finding my own deeper purpose in life, and in just this degree I have fallen short of my own highest self-realization. The only way, then, that I can hope reasonably to realize my own innermost will, my truest self, is by striving to realize ideal values in my experience which are not limited to my own narrow view of the world. Such narrowness is the result of failure on the part of the individual to see his relation to the universal whole of which he is a part. When we substitute the part for the whole, there is bound to be confusion and conflict of purposes, but when I honestly and purposively strive to realize the ideals of universal value my aim cannot be said to be individualistic in any narrow sense. The trouble with the individualistic moralists is due to the fact that they fail to regard the individual in his universal connection with the world of will and purpose. There is no objection to individualism provided it is universalized. However paradoxical this view may seem, it is the view that I believe must be regarded as the most satisfactory view of the meaning and value of life. The chief good must be both universal and individual. But in as much as man is only a part of the whole, his movement must be in the direction leading from the part to the whole. The stress must be laid on the individual rather than on society. My plan of life ceases to be narrow and egoistic when I take into account my relations to my fellow man and to the universe on which my own individuality depends.

Thus exhibited, self-realization is the only worthy ideal and motive of life. If this be the case, the ideal of education must conform to this larger aim of life. We shall consider this matter in its relation to education more fully in the following chapters of this volume. In this view we believe we agree with Professor Wright when he says: "Self-realization has now to be exhibited as the only adequate motive of good conduct, including the three just mentioned and raising each to a higher plane of meaning and efficiency. Self-realization does not combine simply in an external fashion the egoistic, altruistic, and religious motives. It unites them organically, making each a function of the central activity of volition and causing each to express within a certain department of human life the charac-

teristic and insistent demand of volition for a completely organized life." (*Self-Realization*, p. 278.)

10 THE REALITY OF THE IDEAL. The ideal of self-realization is not a mere myth, but is the unity and organization of the ideal values of life, expressed in a personality or an individual. The purpose of the individual is determined by the degree to which he has realized the ideal values in his experience, and through these has perceived his relation to the universal experience, or absolute will. This ideal of self-realization, then, has metaphysical reality, in as much as it is reality itself from the point of view of the individual. From the point of view of the absolute, each individual is to be regarded as a part of the universal whole, from the point of view of the individual, each person realizes himself in just that proportion that he accepts his highest obligation as that of perceiving his relations to the universe through the recognition of the ideal values of his own experience. The ideal of self-realization thus being real as well as ideal, is deserving of our loyalty and the support of our deepest will. "By nature and apart from some cause to which we are loyal, each of us is but a mass of caprice; a chaos of distracting passions, a longing for happiness that never attains its goal." (Royce, *William James*, etc., p. 56.)

11 THE CONCEPT OF LOYALTY. According to our view of loyalty, no person can be loyal to that which does not express his own inner purpose, which does not satisfy the inner meaning of his will. Self-realization, being both ideal and real, being both over-individual and of the very nature of being itself, and further being the expression of our deepest individual will, is deserving of our most deep-seated loyalty and devotion. Indeed our pursuit of self-realization through service to the values of life partakes of the spirit of religion. Man cannot be loyal to that which does not pertain to his own nature. A thing that is purely external to me cannot elicit my highest loyalty. I can be loyal to the true spirit of loyalty only when I am loyal to that ideal which is not alone individual, but has the universal in and round about it. My every act must show my loyalty to the cause which I have voluntarily chosen.

If my ideal is self-realization, then I am betraying my cause if I fail to organize my actions in such a way as to make my highest self-realization possible, and we have already noted that my highest self-realization consists not in ideals that are narrowly personal, but rather in ideals that are both individual and universal. Once we get a deep spirit of loyalty we seek to realize our cause in our every act. Indeed each act is a reflection of the unity and purpose of our lives. We cannot be loyal to a cause and at the same time live a disorganized life. Our life must be a unit and a part of the larger organic reality of the world. It is only when I regard each act as a part of the totality of the universe that I regard these acts as significant. And it is only when I regard them as having this significance that I act from a deep seated loyalty and purpose. If I am to realize my highest self I must not only choose as my ideals the highest good, which possesses reality, and which can be known, but I must loyally devote myself to this cause. If I fail to organize and adjust my several actions with reference to this ultimate aim in life I have betrayed my deepest nature and am immoral. But if I devote myself loyally to the realization of this highest ideal, which has value not only for me, but for the great universe of which I am but a small though important part, then my devotion characterizes my life as truly moral and religious. It is this spirit of loyalty which is the real test of the degree of effectiveness that my ideal of life has for me. It is the index of the pulling power of this ideal. It opens the secret of my inner nature. It shows what I really am. It portrays my real character, my reality or being.

12 SUMMARY. In summarizing the contents of this chapter it is necessary for us to be reminded that ethics represents man's search for the highest good in life, that such inquiries are the results of man's own interests in life, and it is significant that in the history of philosophy we discover that man's chief interest has been in man from the beginning of the Socratic period to the present. All ethical theories since this period, have regarded man's highest good as something related to himself and in this respect I believe that all these theories are right. I believe, however, that some of these theories have

failed to give an accurate formulation of a highest good. The hedonists have placed pleasure as the highest good, something which is really outside what a deeper view of man regards as his true nature. When man succeeds in finding the reality of his being, he will no doubt find that pleasure is one of the essential attributes of the same, but he will certainly find that pleasure alone does not express man's deepest worth and reality.

This worth is to be found in man as a willing being, as a being expressing attitudes and purposes. The fulfillment of all desires and purposes is not necessary nor is it desirable. It is essential, however, that we fulfill the deepest demands of our will and this is possible only when we have harmonized our own will with the will of the universe of which we are a part. This ideal toward which every will tends to express itself is best defined in terms of self-realization, which ideal is not to be regarded in any narrow way, but which expresses the universality of our being in its relations to the whole. It is this ideal of self-realization which is the highest expression of our will. It is the ultimate goal of all human striving and is in keeping with the inner nature and purpose of the universe as a whole. It also represents not only the chief good, but the highest motive of human conduct. Being an ideal of such universal worth and further, since it represents the highest demands of our human will, self-realization is to be regarded as that ideal or purpose which deserves our highest loyalty, and our moral worth and being are to be determined by the degree to which we are loyal to this highest expression of our will.

CHAPTER II

AIMS AND MEANS IN EDUCATION

I THE AIM OF LIFE AND THE AIM OF EDUCATION. If the aim of life is to be regarded as self-realization, then the highest aim and motive of education is also that of self-realization. However we define the aim of education, we must remember that it is essential to distinguish clearly between the aims and the means of education. Ethics has to do with the aim of life, and since education is a part of life it must define the aims of education also. The highest aim of life has already been defined as self-realization. None of this work will need to be done over in order to define the highest aim of education. Education is to be regarded as nothing more or less than an institution set apart by society for the realization of the highest aims and values of life. Therefore we regard not only self-realization as the highest aim and chief motive of conduct in life as a whole, but also, from the point of voluntaristic idealism, as the chief end and motive of education.

It would be very inconsistent on the part of an educator to make the aim of life and that of education such as mutually to conflict. It might be contended that since life is broader in its significance than education, that the aim of life should be broader than the aim of education. Professor Coe says: "The end of true education is seen to fall within, not outside of ethics." (*Education in Morals and Religion*, p. 17.) Education is simply the process carried on by the school which has been set aside as a social institution for the realization of the higher values and purposes of life. Education can, therefore, be of no greater service to man than to help immature persons to realize their own deeper purposes. Education is, therefore, not to be regarded as an isolated process, but rather it is the fundamental process through which the realization of the most complete self-development is made possible.

2 THE CONFLICT IN MODERN PEDAGOGY. There is probably no field in which a greater amount of shallow literature has been perpetrated upon the reading public than in that of education, unless it be in the cheap novel class of literature. The whole educational issue has been so befogged for so many generations that it seems that clear thinking in this field is next to an impossibility. Bowne says: "Until principles are settled there is no bar to the most fantastic theories and interpretations." (*Introduction to Psych. Theory*, Preface.) Münsterberg says: "It is evident that there must be dispute about the means as long as it is not settled what the ends ought to be, or rather as long as we ignore the question of aims as an independent question having the right of precedence." (*Psych. and Teacher*, p. 19.) "Briefly, only psychology and ethics can take education out of its purely empirical and rule-of-thumb stage." (McLellan and Dewey, *Psy. of Number*, p. 5.)

If there is any one field in which investigators seem to be completely submerged in facts and principles, it certainly is in the field of education. If there is any one field of experience where the real issues involved are less clearly defined than in another it must be in education. If there is any field in which facts and laws are not clearly distinguished from purposes and ideals, again I say it must be in education. I do not mean to portray the situation as hopeless. I am not at all pessimistic. It is quite consistent with my own view of life to believe that a man can be critical and at the same time appreciate the good in the thing that he is criticizing. I have no panacea to offer, no patent remedies for sale. Indeed I do not know of any short cut in the matter. As far as I can see there is only one way to relieve the present situation, which arises principally out of the confusion of aims and means in education. Thought is the only cure. We have been engaged long enough in mere experience without attempting to discover the meaning and value of this experience. We have been long enough merely pulling up facts and laws. It is now time that we cease to regard our past as completed, since we have succeeded in discovering the many facts and laws of the universe. It is time that we were making use of these laws and principles in the service of our ideal purposes and values

of life.

The conflict in modern pedagogy is due principally to the failure to distinguish between aims and means, purposes and methods. Ends and purposes in life we have come to regard as absolute necessities of existence. This is not more true in education than in any other field of our experience. Ends we must have and if the right ends are not available we will select a wrong one. If the highest aim is not perceived, we are apt to select a lower one, or indeed, as is generally the case in modern education, substitute a means for an end. If we have the wrong conception of life, we are in constant danger of substituting the part for the whole, or the means for the end. From the foregoing inquiry, it ought to be clear that ethics, or more broadly speaking philosophy, must provide us with the aims, purposes and values in life, and science must contribute the means, or possibilities of their realization. There is no hope for education unless we can clear up the distinction between aims and means, or methods, unless we can perceive education from both the normative and the descriptive, from the ethical and the scientific aspects. We will work out these distinctions in education. We may be a long time at it, but we are certain to work them out, for this is the condition upon which man's highest self-realization depends.

There is a popular view to-day that the teacher is well equipped for her business when she knows the biological laws of health, growth, and development; the sociological laws, defining the principles upon which the social relationship depends; and the psychological laws which govern mind action, but such a view represents the unhealthy state of mind of common sense, and its immediate antecedent is the lack of clear thinking, and the willingness to rest education on a basis of custom and tradition, instead of reason. Very different does the matter become when viewed from the greater heights and clearer vision of a truer philosophy of life. According to the latter view, all education and experience is a meaningless striving unless there are purposes and ideals to be attained, and it is only in such attainment that life possesses any value whatsoever. Prof. Santayana aptly remarks that "If you have no image of happiness or beauty or perfect goodness, how are you to judge what portions of life are important, and what rendering of them

is appropriate?" (*Winds of Doctrine*, p. 183.)

Furthermore, all ideals and values are not of equal importance. Some are narrow and conflicting, others are broad and universal and have a meaning for life as a whole. It is the latter type of ideal that must serve as the basis of all true education. All true education must have a goal, and this goal must conform to the deepest meaning and reality of life, and it must be remembered, as Bowne says, that "The deepest things cannot be argued out; they must be seen in life, and then they justify themselves." (*The Essence of Religion*, p. 181.)

It must represent the highest good in our experience, and this aim we have defined as self-realization, which is made possible through the realization of the ideal values of life. Clear, pure, deep, philosophical thinking is the only salvation for education, at the present time and for all time to come. The conflicts in modern educational theory and practice are due to a failure to regard education as a part of life as a whole, and to distinguish clearly between aims and purposes in life, and consequently in education. Progress will not be possible until such a condition of affairs is cleared up. We may imagine that we are progressing, and there is a certain element of progress in all our aimless strivings, but such progress is too slow and uncertain. No question can be settled permanently which is not settled right, and no question can be settled right which is not viewed in its relation to the universal system of things. Our philosophy of education, then, must conform to the wider philosophy of life. And our ideal of education must conform to our ideal of the highest good, which in our view is that of self-realization.

3 EDUCATION AS A NORMATIVE SCIENCE. We have several times spoken of the relation of the normative and descriptive sciences, showing that the former define our aims and purposes in life, while the latter provide us with the means for their realization. We have asserted, therefore, that the chief normative science, so far as determining our aim of education is concerned, is that of ethics. We must now lay stress on the fact that so far as method is concerned, psychology becomes fundamental in the preparation of a teacher for her practical work. The teacher must have a broader view of the universe

than that given by ethics and psychology, but it nevertheless remains true that these two sciences have most to do with the actual worth of the teacher, the one providing the aims and purposes, the other providing a means and method for their realization. There is an important truth contained in the following lines from the University of Denver catalog: "In as much as education is not an unmixed science, but has its foundation in other sciences, it requires an acquaintance with the history of human thought, with the principles of psychology, ethics and philosophy, to secure the best comprehension of the methods and results of modern pedagogy, and of the ultimate ends of education. It is advisable that some of these courses accompany the work in education."

Contrary to the opinion of a great many popular views of education, psychology can never tell us what we ought to do, or what aims we ought to realize in education. This matter of what ought to be is a matter for ethics and the normative science generally, not for psychology. Münsterberg says: "Ethics, not psychology, must decide the ends to which education has to lead the child, however often superficial educators may believe that in their field the selection of the end is a matter of course and needs no previous investigation." (*Psych. and Teacher*, p. 24.)

Psychology can never give us the true aims and purposes of life. It cannot even be of value in providing means and methods for the teacher until after the aims have been decided upon. We can never expect to see the true place of psychology and the other descriptive sciences until we know what we want to accomplish and what we ought to accomplish in education. The first consideration of education, therefore, is with ethics and it is only through such an inquiry that our aims and purposes can ever be justified. It is unfortunate that teachers do not conceive clearly, this distinction between aims and means, for it inevitably results that when the proper aims of education are not perceived a means will be substituted for the end itself. We must not attempt to separate educational theory from ethical theory. We must push inquiries as to the aims and values in education farther and farther out into the realm of ethics. Prof. Woodbridge says: "The most practical and useful opportunity open to the special student of

philosophy is doubtless in education." (*Columbia University Quarterly*, Vol. XIII.) It is only by regarding education as a part of the larger field of experience that we can ever succeed in formulating clearly the real purposes which education is to realize. Education becomes valuable only in so far as it makes the realization of such ideals and values possible and actual.

4 EDUCATION AS A DESCRIPTIVE SCIENCE. After we have once decided upon the aims and purposes of life and consequently of education, it is then time to try and find out how we are to use the results of the descriptive sciences. It will inevitably be true in education as in life generally, that we cannot make any use of the descriptive sciences until after we have decided what aims and what purposes we are to realize. But once we have gotten clearly in mind the ideal purposes for which education exists, we are then in a position to make use of our specialized knowledge contributed by the different descriptive sciences,—psychology, biology, sociology, and the rest. The sciences just mentioned are important contributors as means in education. They provide us with laws that enable us to understand the connections of our experience,—knowledge we cannot dispense with at any price, unless it be the price we would have to pay by giving up our ideals in the service of which these laws and principles have their only meaning and value.

No amount of progress in psychology, sociology, or biology will ever be able to give us any knowledge of what we ought to do. It is not the business of the descriptive sciences to tell what man ought to do. It is rather the business of this department of our thinking to show the connections that exist between the various facts or phenomena of life. It is only after ideals and purposes are decided upon that a knowledge of such connections can be made serviceable in the fields of education and life generally. What has just been said with regard to the field of education holds equally true in the fields of business, religion, social life, and all other special fields of experience. At no time and in no place will the facts or laws contributed by the descriptive sciences ever take the place of ideals and purposes of life. A mere description of what is,

no matter how accurate it may be, can never tell us what ought to be. No amount of science of mere description and explanation can ever tell us what purposes we should seek to realize in education. If we succeed in clearing up this confusion between the normative and descriptive aspects of our educational theory and come to regard ethics as we ought, as giving us the aims and purposes of life, while the descriptive sciences give us the means, we will then, and not until then, succeed in banishing the confusion that obtains in present day popular pedagogy. Fortunately this distinction is coming to be more clearly perceived by our most prominent educators. Indeed throughout all the history of educational theory there have been some great thinkers who seem to have perceived this relation between aims and means quite clearly. In our common practice, however, we do not distinguish clearly enough between these two attitudes of our will. We have asserted already that according to a broader philosophy science itself is merely an artificial construction, which has been developed as a result of the logical demands of our own will and purposive attitude toward the world.

Science must not, therefore, be regarded as the final court of appeal for educational problems. Rather we must look to ethics and general philosophy for the decision as to the real values and purposes for which we strive. We can, then, go to the descriptive scientists and ask them for all the information they possess as to the external connections of the facts of the universe. We can then call upon the psychologist for all the laws that he knows with regard to the way that the mind acts. We can ask the biologist, particularly the physiologist, for all the laws he possesses with regard to the health, growth, and development of our bodies. We can ask the sociologist to give us the little that he knows at the present time of the laws that govern the formation and the maintenance of the group relationship. But until we have first gone to the ethical philosophy in order to determine our purposes in life, or that for which we ought to strive, all this information that the descriptive scientist can give us will be of no value whatsoever, no more value than so much scrap iron in the dump heap. But the aspect is entirely changed when we see our educational experience from these two points of view, and then from the

larger, more inclusive philosophical point of view. The normative sciences must give us our aims. And once our aim is decided upon we can make use of all the laws that descriptive science knows anything about and all that it ever will know anything about.

5 AIMS AND MEANS OF EDUCATION. The descriptive sciences can be employed as contributors to the means and methods of education, but only after the normative issues have been settled. We must not expect, therefore, that any amount of further development in the fields of science will ever succeed in defining the aims of education. In the very nature of things, this is impossible, and the truth asserted here that ethics must provide the aims of life, while the descriptive sciences provide us with the means, is a universal truth, and is not conditioned by time and space, or personality. If we are successful in making this point clear between aims and means of education we will have accomplished something in the direction of clearing up the conflict in modern pedagogy, about which we have spoken so many times, and which confusion it is the chief aim of this volume to clear up on the basis of the idealistic philosophy. "Means," says H. C. King, "seem often at war with ends, mechanism, with the ideals for which alone it exists. Only the ends are of absolute value, yet the means are indispensable to their attainment. The actual and necessary are not the ideal; the *is* and the *must* cannot give us the *ought*; and yet only through the use of the actual and necessary can anything ideal be achieved. The question of the final harmony of the *is* and the *must* and the *ought* is for us all the question of questions. Its complete answer would be a final philosophy." (*Rational Living*, pp. 22-23.)

The aim of life and of education defined in terms of self-realization is thus not a conclusion to which we have been driven by the descriptive science. On the contrary nothing less than a philosophy of life can decide this aim. It must be said in justice to the descriptive sciences that without the knowledge which they give us our attempt to realize such ideals and values would be vain and hopeless, or at best, very uncertain. Any one recognizes the "unreasonableness of adopting an end and refusing to adopt the means indispensable to its

attainment." (Sidgwick, *Methods of Ethics*, p. 39.) "The method must be planned to accomplish certain definite ends if the teaching is to be purposeful and effective." (G. H. Bestt, *The Recitation*, p. 29.)

6 THE FUNCTION OF SUPERVISION. In this connection we must state the real function of supervision. The superintendent, above all others, must see clearly the direction which education is to take. He must never confuse aims and means. He must always distinguish between facts and purposes, between methods and the ideals to be realized. He must have a broad philosophical perspective, if he is to see things in their proper relation. If he does not have a clear view of the school as a whole and of the relative functions of means and ends he constantly will be confusing the two. He will mistake increased equipment, facts, and principles for real progress and development. If he does not have his eye constantly on the goal to be realized, and select his aims and method and equipment with this ideal constantly in mind, progress under his direction is bound to be uncertain and unstable. W. T. Harris says: "Finally, the first class superintendent is a sort of pilot for the whole system, and must watch the rocks and breakers, and winds and clouds, and look often from them to the eternal stars to ascertain the drift of his course." It is interesting to note that certain superintendents see the real meaning of supervision. Supt. John Kennedy says: "The function of supervision is one of the most interesting departments of Educational philosophy." (*Educational Review*, Vol. I, p. 469.) He says further: "It is the function of supervision to breathe upon a school system the breath of life, to infuse into it a generous purpose and to direct it toward beneficent ends. This pre-supposes educational ideals and an expert knowledge of the necessary machinery of the schools. It is not enough that a merely intelligent man equipped with empirical notions should assume the responsible duties of supervision. Intelligence and executive ability are forceful qualities everywhere but they alone do not equip the physician or the lawyer; neither do they equip the educator. To the necessary basis of common sense must be superadded the science or philosophy of education. The educator must be deeply and fruitfully read in the

literature and philosophy of his profession." (*Ibid.*, 1:467.) The following statement is so apt that I cannot refrain from quoting it. He says of the superintendent that "When he comes to the battle royal with his subordinates and his official superiors, he needs to be fortified with principles that are as universal as nature and as eternal as truth itself." (1:467.)

I do not mean to imply that the teacher herself is not in need of such distinction between aims and means. In fact we have repeatedly emphasized the necessity for the teacher's having in mind this distinction and of governing herself accordingly. But it is particularly important that the superintendent be able to see the trend of things, or see things in their universal relation. Without this broad view it is impossible for the superintendent to consider the different facts and principles, equipment, means and methods in their proper relation. All facts are of equal value, or perhaps it would be more accurate to say of no value at all, if we have no definite purpose or goal in mind. Suzzalo says: "At this point in our progress, we have no larger need than for a philosophy of teaching, which unifies our modern complexities from the viewpoint of the teacher, and raises to attention again, in new and accurate ways, the nature of the teaching personality and the teaching life." (Preface, Hyde, *Teacher's Phil.*, p. XII.)

Above all others, then, it is necessary that the superintendent have clearly in mind the relative function of means and methods. Any amount of understanding of the facts of our experience together with all the scientific improvements that modern invention has made possible, without definite aims and means would not make it possible to realize lasting progress, for as we have seen, progress in last analysis, consists in the larger self-realization of each individual in society, and such realization is possible only through the consciously directed acts of the individual toward a goal of universal value. Just as it is necessary for individual progress that such a goal be kept constantly in mind, and all our means and methods selected with this aim in view, so, too, it is necessary that in order that the school make real progress and development, it must be under the direction of those who keep constantly in mind the ideal purposes for which the school exists.

The superintendent is the chief pilot of the educational ship,

and he it is who must steer the course and register the progress which education makes. When the superintendent's function is regarded from this highest point of view of philosophy, it becomes a matter of no little concern when we select those who are to determine the direction of our educational affairs. The superintendent must assume the obligation of steering the whole system of schools toward the ultimate goal of education and life, and the degree to which he is successful in realizing this ideal marks the degree of value of the system as a whole. Nor should the superintendent forget that the school system itself, as a material organization, must be in a true sense an organic unity. Every part must function in complete accord with all of the other parts. Under no other condition is real progress through the agency of the school system possible. If one part of the system is working at cross purposes with some other part, then there is lost energy and friction, resulting ultimately in the waste of human purpose and energy, the most real and valuable thing in all the universe. The schools of the future will regard functions of organization as of increasingly greater value. The real superintendent is the functional head of the school system, who keeps constantly in mind the ideal purposes and values and who, looking at the matter from the descriptive view of science, regards every element of the system as a functional and organic part of the whole. The value of a part must be determined by its functional relationship to this whole, which alone gives significance to the part. This is just as true in the case of the material organism of the school system as it is that each fragment of our human experience be assigned its value in proportion as it functions in the interest of the whole, as an organic unit of all of the parts.

7 SUMMARY. In summarizing the main points of this chapter it is only necessary to point out briefly that the aim of education, being a part of life, must conform to the aim of life as a whole. It is true, then, that "Every aim proposed by the educator which is not in harmony with the intrinsic aim of human nature itself, every method or device employed by the teacher that is not in perfect accord with the mind's own working, not only wastes time and energy, but results in positive and permanent harm, running counter to the true activi-

ties of the mind, it certainly distorts and may possibly destroy them." (McLellan and Dewey, *Psy. of Number*, p. 4.) The conflict in modern pedagogy arises out of the fact that no clear distinction is kept in mind between the aims and purposes of education. The only hope of reconciling this conflict is by substituting clear thinking for the clouded view of common sense. Nothing short of a real philosophy of life will offer a satisfactory basis for educational theory and practice.

The normative sciences, then, must be called upon in order to determine the real aims and purposes of education. The descriptive sciences must contribute the laws and principles, or, in other words, the means and methods at our disposal for the realization of these ideals of life. The school must function as an organic unity in the realization of these eternal values, to the end that each individual may realize his highest and truest self; and in order that such progress may be certain we have placed upon the superintendent of schools, working through his subordinates, the burden of directing the school constantly toward its ideal aim. He must never lose sight of aims and purposes, nor must he confuse the ends which education is to realize and the means or methods by which they are realized.

It is also true that the teacher, if she is to perform her part in the great educational system, must have this distinction in mind. The chief difference between the function of the teacher and that of the superintendent is that the latter must keep in mind the whole system of education, while the former is concerned more immediately and more directly with the aims to be brought about by direct teaching. We shall soon find, however, that the aims of the teacher must conform to the wider educational aim, just as truly as the educational aim must conform to the aim of life as a whole. We now turn to the chapter in which self-realization is exhibited as the highest educational ideal. We shall attempt to show how this is made possible through the realization of the ideal values of life.

CHAPTER III

THE AIM OF EDUCATION AS SELF-REALIZATION

I THE IDEAL VALUES OF EDUCATION: TRUTH, BEAUTY, GOODNESS, AND RELIGION. According to Chapter I of Part V the highest aim of life was defined as that of self-realization. This was asserted to be the chief end of all life and of all human striving, as well as the primary motive of all conduct. We must see now how such an ideal is possible. We have asserted already that it is possible only through realization of the ideal values of life, and these we have seen to be truth, beauty, goodness, and religion. We have called them ideal values for the reason that they are not purely individual, but rather are universal in their meaning and worth. They are individual in the sense that they are of value for everybody, and they are universal because they are the highest values of life. Our aim of self-realization implies a constant training of the immature minds in such a way that they will be willing and able to serve these ideal values of life. Every worthy life realizes all of these values in considerable degree. This is what is meant by universalizing, broadening, and deepening the life of the individual. These are values that have their significance, not in their relation to any individual alone, but to life as a whole. We gain our own individual significance in the degree that we appropriate and realize in our own lives these ideal values. "Education is an effort to assist immature persons to realize themselves and their destiny as persons." (Coe, *Edu. in Religion and Morals*, p. 120.)

2 THE UNITY OF THE IDEAL VALUES. These are the ideals. The question that naturally follows from the preceding chapter is, "What are the means for attaining our ideal?" As we have already noticed, educational theory

concerns itself not only with ideals and purposes to be realized, but also with the methods or means for realizing these. There are a number of different means at our disposal for the realization of the ideal values of life. We shall consider these in greater detail in Chapter V. It will suffice here to remark that these values are to be attained through the pursuit of the different branches of knowledge, where these subjects of study are regarded as means to an end and not substitutions for the end itself. The curriculum, then, is one set of means for the realization of the ideal values. The teacher is another means for aiding immature minds in their highest self-realization. This does not disregard the fact that each individual is an end in himself, as well as a means for the realization of other ends. The recitation is another factor, and the organization of the school system is yet another means for promoting the highest degree of self-realization. One's occupation or vocation in life is yet another. Here we want merely to suggest that self-realization is an aim which is possible, and is not a pure myth.

Through the instrumentality of teachers, the program of studies, the school organization, and the social life, or the school, individuals are to be brought to their highest degree of self-realization and loyal devotion to the ideal values of life, truth, beauty, goodness, and religion. It is the organic unity of these ideals that constitute the essence of true self-realization.

There is no danger that the school become narrowly practical, or abstract, if the ideal of self-realization is kept clearly in mind. For while the individual is to realize the absolute or universal values, he is to do this in his own way, and in so doing he is expressing his own deepest meaning and worth as a factor in the great world of value.

3 THE PERSONAL FACTOR IN THE EDUCATIVE PROCESS. The universal values of life are the same for every individual. There is no meaning to the statement that my highest good may be your least good. The highest good is independent of my own narrower individual view of what constitutes my real good, and yet the ideal values themselves have a deep and abiding significance for me, and just because they express my truest self. They are in a sense the picture of what I would be if my meaning and experience were brought

to their full fruition. We must never lose sight of the fact that each individual pursues the ideal values of life and the purpose of education in his own characteristic way. The assertion that the goal of life and of education is the same for all of us does not imply that each one of us is to reach this goal by the same process, any more than the fact that all of us are to be of some service in life, can be taken to mean that we must perform the same deed. This would be a useless duplication and would represent endless waste of energy and purpose. We all have the same ideal value of life when our own deeper purpose is clearly perceived, but each one of us has his own way of realizing these ideal values. We thus see the individual and universal aspects of our experience to stand in no necessary conflict.

4 SELF-REALIZATION AS THE ALL-COMPREHENSIVE EDUCATIONAL IDEAL. Self-realization is to be regarded as the only sufficient motive and ideal of conduct, for the reason that it places the estimate of value where it belongs, in the individual rather than in society. Whatever I regard as having value must have some definite relation to my own being and reality. Aside from such connection it has no value whatsoever. But the individual's own particular value is to be derived from his relation to the absolute experience, or the universal will of which he forms a part. Self-realization is from this point of view the most comprehensive and the most satisfactory ideal for the individual, and carries with it as a natural corollary the improvement and progress of society, or social welfare. Professor John Adams aptly says that "This is not an accidental difference, but indicates a characteristic attitude towards human life. Self-realization is in itself an all-comprehensive educational ideal, so wide, in fact, that we cannot treat it satisfactorily as a whole till we have passed in review all the educational systems. But in the present connection the aspect suggested by the term self-expression calls for immediate treatment. It emphasizes the side that is usually indicated by self-assertion. Now the very notion of self-realization, even in its highest form, necessarily implies a certain amount of assertion of the self. It demands to come to its own, and must in self-defense bring itself into a certain prominence. But self-as-

section is essentially individualistic, self-realization is not. The wider idea is based on the organic conception of society, and considers the self not so much as realizing itself against society as realizing itself in society.

There is no such thing as social welfare apart from the individual who constitutes society. There is then no merit in the ideal of social progress or welfare that is not contained in the ideal of self-realization. The latter term is to be preferred for the reason that it more completely expresses our own attitude toward life, and most completely represents our innermost attitude toward life as a whole. Social welfare is the fruit of self-realization as viewed from the aspect of our social relationship. We must not substitute some hypothetical unit in place of the individual himself. Self-interests or personality have meaning and worth, and aside from such worth society is a myth. We have gone too far already in placing stress on the value of society to the neglect of the individual. At times it would seem that we have almost swallowed up the individual in a mythical society which would have no existence at all except as it is made up of individuals. Professor Ladd says: "We are too much losing sight of the concrete individual in a collective, but entirely mythical personality, called 'society.'" (*The Teacher's Practical Phil.*, p. 273.)

5 THE INDIVIDUAL AND SOCIAL VIEWS OF EDUCATION RECONCILED. We find in much of the educational literature of our present day that the individual aspects of education are practically ignored, at least in theory, and sometimes this is too much the case in actual practice. We seem to forget the fact that society has its only existence in the reality of the individual, and we have found the most real nature of the individual to be expressed in terms of his will attitude, and it is this will attitude or relation which gives meaning and significance to his life and makes possible the development of a true self or personality, the only thing of worth in the universe. How, then, can we submerge the individual units of society in a larger group and emphasize the value of the latter to the neglect of the former? I do not mean to suggest that all of our present day teaching lays the stress on society to the neglect of the individual; on the contrary, I see many hopeful signs that

a clearer vision of things is evident in the field of education, and yet the danger is too great that in order to escape the criticism of being individualistic, we swing to the opposite extreme and proclaim the values of society to the neglect of the individual's true worth and being.

There is no excuse for an individualistic theory of education, if we mean by this an isolated view of the individualistic theory of education, if we mean by this an isolated view of the individual's work. No individual has worth except in his relation to the whole unity of life, of which he is but a single part. Aside from such an organic unity expressible in terms of personality, the individual's life has no value or meaning, but in such a relationship the individual secures the only value which he possesses. We must, then, not stress the value of the individual as an isolated fragment of the universe when we are seeking to know the ultimate aims of education, but we must keep in mind the fact that the individual gains his only value from his relation to the whole. The relation is to be developed through education of the individual in such a way that he will be both willing and able to realize in his experience the ideal value of life. In other words, through education the individual is to actualize the universal in his experience.

When the individual devotes himself loyally to the ideal values of life he is not engaged in a search for values that belong to himself alone, but which are the essential attributes of a world of meaning and worth. Such a loyal devotee of the ideals of life cannot be regarded as individualistic in any narrow sense. On the contrary, he is a highly socialized being, and is productive of the greatest possible degree of social progress by virtue of the fact that he is actualizing the ideal value in the life of his own experience, and thus bringing into being the necessary condition for the only real progress about which we know or can know anything. "The one and only reason why from the standpoint of self-realization the exercise of man's spiritual capacities is better than the gratification of his natural desires is that such spiritual activity results in a larger and more comprehensive life. Thus the attainment of ideal ends, intellectual, practical, and æsthetic, represents the realization of the whole self, in contrast to which the material comfort and pleasure stand for the interest of the

partial self." (Wright's *Self-Realization*, p. 227.)

There is, therefore, no necessary conflict between the individual and the social aspects of education. The individual socializes himself not by accepting some mythical ideal or aim, such as social progress, but rather he devotes himself to the realization of the ideal values of life, and in so doing he universalizes, or socializes, his own narrow life, and thus not only makes for self-realization, but for social welfare and human progress, which are the natural consequences of true self-realization. Much has been said in recent years about the individual and the social aim of education, but very little progress has been made in the way of reconciling these two points of view, notwithstanding the fact that there is no essential conflict between the two. They are aspects of a wider view which includes them both. The stress, however, must always be laid on the individual, yet not on the egoistic. We must socialize the individuals of society before a real and substantial society is possible. This process of socialization is made possible through the willing and devoted service of the individual to the ideal values of life. In serving these ideals which are of value to himself, and yet whose values are not limited to himself, he comes to regard man as dependent upon his fellows. Indeed he sees in the progress of his own development a broader and better society, and he sees social progress through this individual self-realization contributing in return to his own larger possibilities of self-realization. He regards the universe as a great system and organic unity of purposes, for the purpose of each individual must be consistent with all other purposes, or must be viewed in the light of the whole. President Hyde rightly holds that "The measure of a man is the range of interests he makes his own." (*Practical Idealism*, p. 165.)

It is true that man is a social being and his own deeper purposes cannot be determined without consulting society as he goes along. But rather than ask questions concerning the ultimate values of the world for some mythical organization such as society, he turns toward the ideal of life and through constant individual efforts directed by a steady gaze upon his purpose in life he sets the warring purposes and interests of his life into a compatible system. Through such an organiza-

tion of self-interest and self-will, he realizes constantly his deeper relation to the universal experience of the absolute. His ideals are, therefore, not narrow and egoistic, but in the highest sense, social and universal. In the service of such ideals and values he is performing the greatest possible service to society. Instead of saying, therefore, that man owes service to his fellow man, it would be better to say that his constant service must be directed toward the realization of the eternal value of life. In so doing society does not suffer from his misplacement of energy, but rather it profits to the highest degree therefrom, for instead of being energy misdirected, it is direction toward the only ideal from which we can expect to reap any lasting reward in the form of real social progress. Man's service to man is, therefore, not an end in itself, but rather one of the ways of realizing the most for society through the attainment of his own largest self-realization.

We propose to reconcile the two apparently conflicting aims of education, the individual and the social, by regarding these two aims as different aspects of a larger purpose. The individualist is right in arguing that the ultimate aim of education and life must be of some value to the individual. The social theorist is right in his contention that the ideal of life must conduce to permanent social progress, but each is wrong, if he means that we regard the two views as essentially contradictory. On the contrary, both views are necessary and equally important, and we must not forget the one while we have our eyes fixed on the other, but we must always remember that the individual's own deeper purposes must give us the starting point as well as the end of our search for the highest good. The only adequate motive for conduct is some good to the individual, but the only great good to the individual is that which is universal, or over-personal and is equally good for all persons.

This ideal good of life is to be obtained by each one pursuing his own special purposes, but can be obtained only when he considers his purposes and ideals in their systematic or organic unity with one another and with the other individuals of society. Man becomes more of an individual in his pursuit of the ideal values of life. He must constantly develop to a

higher degree his own purposes and interests, that is, he must move constantly in the direction of self-realization through the attainment of the ideal values in his own experience. Thus in becoming more of an individual, more truly a person, he is coming to be at the same time more highly socialized. Thus all true education leads in the direction of a more highly socialized individual, and this higher socialization is not in conflict with the ideal of true personal development. On the contrary, the individual becomes his truest self only in his broader social relations. Man does not lose his individuality by taking the broader view of life which includes his fellow beings as constituent parts of the same organic whole, but rather he becomes more truly a person or individual of the same organic whole when he comes to regard himself as so related. There is, therefore, no conflict between individualism and socialism in education. The conflict is only apparent, being real only in the sense that clouded or befogged thinking inevitably produces such an apparent conflict. According to the philosophy of idealism, this conflict is neither necessary nor real.

We thus overcome the apparent conflict between the individual and social views of education by changing our conception of what a true individual is. An individual expresses his truest self only when he regards his connection through will and purpose with other individuals of the world. Man is not isolated from his fellows but rather he is intimately bound up with them. It is not possible to separate completely my point of view from that of the universe, or my purpose in life from the deeper meaning and reality of life as a whole. It is necessary, however, that I regard my own individual purposes as most truly expressed in the service of values that are worthy not only for me but for all individuals, and it is the business of the school to train immature individuals in such a way that they will be willing to serve such ideal values, and it is through such means that the development of the truest self or personality is possible.

6 SUMMARY. By way of summary of the chief points of this chapter we must remind ourselves that the ideal of education is that of self-realization, and is made possible through the

willing devotion of an individual to his cause in life, which cause is not independent of his fellows, but rather is closely bound up with them. Professor Euchen says: "Unless faith in some lofty ideal infuse zest and gladness into every department of our activity, we cannot realize the highest possibilities of life." (*Meaning and Value of Life*, p. 1.) It is through the devotion of an individual to the ideal values of life that a truly socialized individual, or real personality is developed. A man's worth is to be determined by the breadth and range of interest which he regards as belonging to himself. These individual purposes and will attitudes must be harmonized with each other and reconciled with the larger view of the totality of his experience and with his fellow beings. Professor Münsterberg rightly says that "Education is to make youth willing and able to realize possibilities of life." (*Psychol. and Teacher*, p. 70.) Again he says true education consists in training pupils in "Loyalty to the ideal values of life." (*Ibid.*, p. 75.) Shakespeare wisely says:

"To thine own self be true;
And it must follow as the night the day,
Thou canst not then be false to any man."

CHAPTER IV

THE RELATION OF THIS IDEAL TO EDUCATIONAL PRACTICE

I THE RELATION OF THEORY AND PRACTICE. Before we can answer specifically the question as to just how the ideal of self-realization is to be made actual in our experience, we must consider the larger question as to the relation of theory and practice generally. Theory is not in necessary conflict with practice any more than the social and individual aspects of education or life are in necessary conflict. On the contrary, theory is our attempt to show the meaning of our experience. Every theory is a proposed explanation of a certain group of phenomena, or from the philosophical point of view, it is the attempt to show the meaning of our fragmentary experience for life as a whole. The theory of education, therefore, is an attempt to offer an explanation of the meaning and value, as well as the connection, of the facts of our educational experience. Theory acts as an ever present guide to practice. If we do not have a theory in mind, practice becomes meaningless. Findlay speaks approving of:—"That habit of associating theory with practice, of seeing the whole in the details, which is the foundation for rational progress not only in teaching but in every trade and profession." Professor Whitehead says, "Wanting the theory, instruction becomes aimless." W. T. Harris says, "The statesman or the teacher knows practically when he knows the trend of the system which he is to direct or manage." (Preface to *Boone's Edu. in U. S.*, p. 6.)

It is only when a theory is offered as an explanation or an interpretation that life gains any significance or value at all. Our educational practice is to-day greatly in need of a sound philosophy which brings together the various facts of our experience in order to show their meaning and value for life as a whole. The broader theory of education must also include

an explanation from the point of view of the descriptive science of the facts and phenomena of our experience. From the descriptive point of view a theory of education becomes a science of education and consists in the explanation of the phenomena of our experience in their external connections one with another. A theory of education from the philosophical point of view is an attempt to show the meaning and value of this experience which science attempts to relate in a causal scheme of things.

The true scientist as well as the true philosopher recognizes the value of theory as unbecoming in a man of real intelligence. Common sense, as well as science and philosophy, proposes theories, but her theories are so seldom correct, as a result of unclear thinking, that she has grown sceptical of all theories, except the theory that all theories are of little value. Our attitude toward theory is very different from that of common sense. We regard theorizing as an essential part of life and as the natural outcome of reflection and thought on the facts of our experience, and the doubts that are placed upon theory are sufficient evidence of the fact that common sense has altogether too large a place in the life of man, to the exclusion of the clearer views of science and philosophy. The real scientist and the true philosopher do not regard theory as an end in itself, however, but as a means of getting on better with the world. Every theory and hypothesis must be tested by experience, but theory itself is possible only as a result of our attempt to explain, or to interpret the facts of our experience.

It is the true theorist who has the vision or ideal of a better state of existence than is now realized. It is he who is the real idealist in the world of practical life. It is he who adjusts his experience with reference to this larger view of things and thus develops a systematic way of viewing life from above. We cannot then dispense with the theory. Professor Peabody truly says that "The abstractions of ethics lead, not to remoteness and detachment, but to discernment and horizon. The chief source of perplexity in the social question is in seeing it from below, the chief source of courage in the social question is in seeing it from above." (Peabody, *App. to Soc. Ques.*, p. 146.)

2 EDUCATIONAL THEORY AS AN EXPLANATION OF EDUCATIONAL EXPERIENCE. What has been said above with regard to theory generally applies equally well to the particular field of education. We are suffering either from the lack of theories in education to-day, or from a superabundance of theories with no stronger foundation than common sense, custom, or tradition. Education must be removed from this rule-of-thumb practice of common sense, and set upon the greater heights of a truly scientific and philosophical plane of life. In education we are greatly in need of a foundation that will set each fragment of our educational experience in proper relation to all others. In other words we are greatly in need of a philosophy of education, which will show the meaning of each part out of the rule of thumb methods of common sense, and consider it in the light of the larger system of causal connection. We are therefore, in need of a better theory of both the worthy aims of education, and of the means and methods to be employed in their realization. Such views of our educational experience would unite in our larger theory or philosophy of life as a whole, and certainly would result in untold good to the education of the present day. We must cease to regard theory as having no connection with the real practice of education. We must come rather to the view that the only possibility of bringing order out of the chaos and confusion of modern pedagogical doctrines is to view the whole of our educational experience in the light of this larger theory of life.

We are not to suppose, therefore, that the one who sets about his problem without a theory will necessarily succeed best in solving his problems. On the contrary the one who does not set out with some definite theory or hypothesis is almost certain to proceed in an aimless fashion. If we have no theory to guide us we are in danger of wandering about without accomplishing any very definite results. On the contrary, if we set out with a certain theory or hypothesis we have something to guide us through the many isolated facts. It is not possible for us to handle the problems of education without having some definite theory, and this theory which controls our educational experience must be large enough and inclusive enough to take account of all the facts of our edu-

cational experience. In other words, we cannot get on in this business of education without a philosophy, and this philosophy of our educational experience must harmonize with our broader philosophy of life.

We have suggested already that the philosophy of life which we hold regards the universe as best expressed in its reality in terms of personality or will. The great meaning of all of our human experience is to be found in the will, not in any individual will to be sure, but in the will of the universe of which each individual is a necessary part. This individual will is constantly striving toward an end, which end is not outside of itself, but rather it is expressed in terms of its own self-realization. The will is seeking perfect relationship with the universe of which it is a part. We cannot express the meaning of our experience except in terms of this will, and we cannot discover the significance of our individual will except in terms of their relation to the will of the absolute personality of the universe, which is the ultimate meaning and reality of all experience and the absolute meaning of life. This theory of life must always show itself in every part and fragment of our life, education, art, religion, ethics, politics, social and business life,—in fact in all fields of our experience, we must aim at the realization of the complete self. Now this aim of life, and consequently of education, is the theory which we propose as the solution for our educational conflicts, in so far as they relate to the aim of education. The only way to remove education from the common sense basis upon which it now rests, and to reconcile the conflicts we find in this field of our experience, is to strive for the realization of this ultimate aim. This will bring order out of chaos, unity out of confusion and disorder. It is only as we keep our eye on this ultimate goal that our experience begins to take order and significance. It is only in such a system that facts of experience have any value and that their relative values can be assigned. A part has significance only in its relation to the whole. No part of experience has any significance apart from such relationship. It is, therefore, meaningless to inquire into the value of any particular part of our educational experience, unless we are viewing this part on relation to the whole, which relationship gives it

the only significance it has for life and experience.

In what has been said above lies the suggestion that our aim will modify or affect our means or methods. We shall see as we proceed in this and in the two following chapters that such is the case. We shall give particular attention to the necessary consequences of such a doctrine, or theory, as that of self-realization. In fact we have suggested already a good many implications of this philosophical theory.

3 THE ACTUAL AND THE IDEAL AS PART AND WHOLE OF EXPERIENCE. According to this view there is no necessary conflict between the actual and the ideal. These are only two aspects of the larger view of experience. They are the part and whole about which we have so many times remarked, the actual is the part of reality that exists in a temporal and special order of the universe. We cannot deny reality to our world of time and space. This thing has been done in the history of philosophy, but always without sufficient reasons being stated for such a denial. According to idealism the actual is experience viewed from an angle of time and space, or from the world of causal reality. That is to say, it is the world viewed not from the point of view of the whole, but from the point of view of the part of our experience. The actual and the ideal, therefore, are related as fragment and whole of the universal reality. It is meaningless to ascribe reality to the fragment of our experience, while at the same time denying the reality of the whole represented in the ideal. It is equally meaningless to ascribe reality to the whole or the ideal while denying such reality to the fragmentary experience of our life. The only way to view experience is to determine its relation as part in a time and space world of causality and sequence, to the universal whole which is not confined by any such temporal and spacial boundaries.

We do not, therefore, deny to the experience of our present life, or to that of education particularly, any reality that it possesses, but we do urge that such reality be ascertained in the light of the larger experience, and in terms of this relationship we are to ascribe the value of our educational experience and determine the values which the various parts possess. All of our talk about educational values is entirely

meaningless unless we have an ideal in mind by which we measure the relative values, or the different parts of our experience as determined by their relation to the whole. It is only in the light of such a philosophy that educational values can be determined, for such values are determined by the relation of the part to the whole, or another way of stating the same thing, the values of our educational experience are to be determined by their effectiveness in promoting the ideal which has been set up as the aim toward which we are moving. According to the view here expressed the highest aim of life and of education is that of self-realization.

In the light of such an educational theory each subject in the program gains its significance by the degree to which it promotes this ideal of life, and just here we must remind ourselves that there is no arbitrary way of stating what subject in the program of studies possesses the greatest educational value. According to this philosophy all such important matters are removed from the common sense basis and are elevated to a higher plane of thought. Our attempt to assign relative values to subjects in the past, and even continuing in our present, represents little more than an attempt to assign values on the basis of such a common sense theory. Idealism removes such important matters from common sense and places them in charge of those who see values in their relation to experience as a whole. According to the ideal of self-realization the only proper way to consider the value of a subject is to ascertain the degree to which it promotes the eternal values in the life of the individual.

We must always remember that individuals are different and are not mere carbon copies of one another. Each individual must have a right to express his ideal values of life, that they must therefore attempt to do this in the same way. On the contrary the most important thing in the individual to take cognizance of in the educational process is that of his own will and interests. If we are to go counter to the educational process we are going to defeat the aim which we set out to realize: namely that of the highest self-realization of the individual. There is no possible way of realizing the self unless we take account of its own mode of operation, its own interests and purposes. This does not mean a *laissez*

faire policy in education. It simply means that if the individual is to realize his greatest possibilities in life, it is necessary that teaching, and the educational system generally, take account of the individuality of each pupil, and this means to allow it to express itself in the way most natural to itself.

We are to estimate the value of the subjects, then, by their relation to the will of the educand, or the one who is to be educated. The only eternal values in all the universe of reality are those of truth, beauty, goodness, and religion. All other values are only partial and hence relative. Whether or not history is better for me than geography, depends on whether or not I am able to see life in its truer proportions through history than through geography. It is simply meaningless to assert that history has greater educative value than geography. Educational values depend and always will depend, on the individual educand. A number of writers on educational topics seem to lose sight of this truth, and assign values to the different subjects in the program of study in accordance with some arbitrary principle chosen in the light of their own limited experience. There are those who assign very little or no educative value to Latin and a great deal of value to history, or mathematics, or literature. Just why they do so is probably not so hard to explain as to justify in the light of a larger philosophy of life and education. If a boy can see his way in life more clearly through the language of the Romans than he can in the modern scientific laboratories of the chemist or the physicist, I see no reason why it should be held that this subject does not have greater value for him than do the laboratory sciences.

There is only one way to look at the matter from a larger philosophy of life, and that is to regard the whole universe as constituted of absolute values, and the world of our practical experience, which is but a part of such an absolute world, consists of only relative values, that is, they are only part of a larger whole. We cannot realize completely the absolute values in a world of time and space. For this would be to realize the eternal in the temporal order of things, but certainly this is a very different thing from assigning values of a rather absolute character of certain subjects and then arbitrarily placing others in certain definite relations to this

standard, and on the basis of such a relationship defining the relative values of the different subjects in the program. No, there is but one way of handling this matter in the light of general philosophy, and that is to regard each individual as possessing absolute meaning and worth for life as a whole, and of assigning to each individual's experience values in proportion to the degree that such experience promotes his self-realization. If, then, Latin is the subject through which a given individual perceives his relation to life best, and through which he sees the meaning and connection of his experience and of the world, then this subject is for him of greatest relative educational value, and we must cease to allow pedagogues arbitrarily to assign absolute values to certain subjects equally arbitrarily chosen, and then define the value of all other subjects in terms of this standard. On the contrary, we must hold to no standard other than the ideal of completed self-realization, and holding strictly to our theory we must view the value of each subject in terms of its power of realizing the possibilities of the individual concerned.

There is no such a thing as assigning absolute values to the things which have only relative value. Every subject has only relative value, and nothing in all the universe of our partial experience can have absolute value in the sense of being entirely complete and wanting nothing. On the contrary our experience is always partial, and therefore relative, and the value that we assign to each part must be determined always by its relation to the whole, or by the degree to which it promotes the realization or the ideal. Viewed in the light of such a theory, no one subject of the curriculum has any greater value than any other for all individuals of the universe. Thus we see one very important educational implication in so far as educational experience is valued in the light of the theory of self-realization. Such an educational doctrine follows as a matter of natural and logical consequence from the theory which defines the meaning and value of our temporal experience in its relation to the whole, or the relation of the actual and the ideal in life.

4 THE VALUE OF A LIFE IDEAL. We must lay special stress on the value of an ideal for life, for as we shall see this

matter has great significance for our procedure in education. "Ideals", Professor Ladd says, "are certain conceptions which have an emotional value, which have also a pull upon the will and which set the aims of the workman at an altitude appreciably higher than the facts and actualities of present attainment. And the educational ideals must, like all other ideals, "be considered in the light of the principles of a true practical philosophy." (*Teacher's Practical Philosophy*, p. 19)

An ideal is an ever-present goal toward which we move. We do not always keep our eye on the ideal, and psychologically it would be unwise for us to attempt to do so, but it is nevertheless necessary that we have such an ideal in life, and that we occasionally glance from the complex experience of this temporal life toward this ideal, which represents the picture of a completed life, such as is known to us through the part. The ideal is, therefore, not meaningless, something outside of experience, but rather it is a picture of a more ideal state of existence. It represents our experience run out to its logical conclusion. The ideal and the practical must not be regarded as different parts of our experience, rather the ideal is the partial experience filled out to its completion. To be sure the ideal changes somewhat as we enlarge our experience, and is therefore never a complete and final picture of our present fragmentary experience. Indeed it would not be possible for a man in a partial world of time and space to form a complete picture of life as a whole. This does not mean that he cannot form an accurate picture of it, nor does it suggest that such an ideal representation of it has no reality, on the contrary it is the expression of a more completely realized experience.

The ideal must be believed in. We must regard it as having value and reality, otherwise we do not follow it with the loyalty and devotion that is deserved by such a reality. If we regard our ideals as simply ethereal visions, we will not be able to use them in the realization of a larger life. President Briggs says, "Education is not in a high sense practical unless it has an ideal in it and round about it." (*Routine and Ideals*, p. 35) J. F. Brown says, "An ideal is an ever-present guide, and, like the demon of Socrates, it serves in the absence of parent, teacher, and friend." (*Am. High School*,

p. 290) Again Briggs says, "He who loses his ideals loses the very bloom of life." (*School, College and Character*, p. 132.) Ruth M. Weeks says: "A clear-cut ideal is the first step toward drafting a workable program." (*The People's School*, p. 167)

Our ideal must represent a greater reality and it must lead us on constantly toward a life of more complete self-realization. If we lose faith in our ideals our experience loses its significance and value. On the contrary if our ideal is regarded consistently as we enlarge our experience, we relate each fragment of it to this ideal in order to ascertain the relative value which each part possesses.

5 THE MEANING OF CHARACTER AND PERSONALITY. The individual who does not govern his life in accordance with an ideal or a definitely definable purpose lacks consistency and uniformity, which are the essential attributes in the formation of character or personality. Each individual establishes his character by faith fully executing the acts or deeds which are determined by the ideal which is the ruling purpose of his life. "A purpose is possible only through an ideal which is to be realized by the adjustment of means to ends." (H. W. Dressler: *Ed. and the Phil. Ideal*, p. 205) Without such an ideal there is no controlling motive or purpose in life and consequently no well established character or personality. Now the most essential factor in the life of the individual is just this factor of the will. We must, therefore, use every effort to preserve the will in the process of education. The will is a factor that can be governed and educated. It is the duty of the school to take part in the direction of this will. The school must provide an opportunity for each individual will to seek the ideal values of life in its own way. We must, therefore, allow free play of individuality, except in so far as the will, which is the essential attribute of personality, is controlled by the ideal values indispensable to all complete self-realization.

Character and personality have no meaning apart from a consistent organization of the interests and purpose of the individual life, and such organization is not possible except where the life is governed by a clear ideal or purpose. Under

such conditions a definite organization of interests and purposes is possible. In this connection we note what several writers consider character to be. Professor Palmer says:—"By character we mean any established mode of feeling, willing and thinking." (*Prob. of Freedom*, p. 78) Professor Coe says, "Character is confirmed habit of moral choice." (*Education in Morals and Religion*, p. 58) It will ever be true that "Those who have a well-ordered character lead also a well-ordered life." (*Bakewell Source Book in Phil.*, p. 61)

The one thing absolutely indispensable to a life worth living is an ideal purpose in accordance with which one directs and organizes the affairs of his life. This is the chief merit or value of an ideal for each individual. The school must not lose sight of this fact, and must help to instil ideals in the minds of the pupils, but it must leave them to realize these ideals in their own way, and cease trying to force every individual into the same line.

6 INDIVIDUAL DIFFERENCES. In the foregoing sections, we have suggested the necessity of allowing to each individual the right to realize the ideal values and purposes of life in his own way. This is another way of stating the necessity of taking account of individual differences. All the psychological and epistemological studies made in recent years point to the necessity for taking account of individual differences. Individuals are not all constructed on the same plan. Their different environments, hereditary antecedents, and training give certain shape and direction to their interests in life, which must not be ignored by the school if it is to enlist the co-operation of these natural influences in the process of education.

The ideal values of life, truth, beauty, goodness, and religion are universal, and their value does not consist in the fact that they are related to any one single individual, but rather because they are universal in their significance. They are equally valuable for all individuals, but they are to be realized by each individual in his own way, or through the expression of his own interests and his own deepest will. The school has too long acted as a barrier to the most complete self-realization of individuals, just because it has at-

tempted to force all persons into the same line by a narrowly restricted program of study, or by certain artificial prescriptions, or by restrained and unnatural election of studies. Pupils must be given an opportunity to find themselves; this is the most important task that lays before every teacher,—*to help the pupil to find himself*. The highest obligation placed upon the teacher, and on the school as an organization, is that of assisting the pupil to find his own self, and how this can best be expressed and developed in life.

It is not to be inferred from the above suggestion that I believe in unrestricted election of studies; on the contrary, I believe that such restriction is necessary to the best interests of each individual and the school as a whole, as well as for society. A pupil should be given an opportunity to select his studies not on the basis of his own temporary likes, but his deeper purpose must be found through the aid of the teacher, or special adviser, who considers not only the pupil's side of the case, but the parents' also, and the needs of society. The environmental or sociological conditions of the pupil must be considered. Once the selection has been made, there must be no change allowed in the pupil's program until it is deemed advisable by all concerned. The pupil should not be allowed to take up a subject and drop it at will for any but the most convincing reasons. Voluntary selection that does not take into account the deeper purposes does not make for self-realization, or from the other side of the process, social welfare. In the interests of the individual and the society of which he forms a part, certain restriction in keeping with the highest rationality are not only desirable, but positively necessary.

We must not lose sight of the fact that each individual should be allowed the opportunity of realizing the highest values of life through the expression of his own individual will and purpose. But such will and purpose must not be mistaken for mere momentary feelings of like or dislike. Pupils must govern their selection of studies and their pursuit of the same with a higher degree of rationality than has been evidenced in general up to the present time. The only safe guide in this matter will always be found to be some life ideal which controls our whole system and range of interests in life. Such an ideal I have defined in terms of self-realiza-

tion. There may be other purposes, and I am sure there are, but to my mind no other ideal of life or education so completely and so adequately expresses the ultimate ideal and the chief motive of our conduct as individuals.

7 SELF-ACTIVITY, SELF-RESPONSIBILITY, AND SELF-REALIZATION. If the individual is to realize the ideal values of life in his own way we must allow unrestricted expression to the instinctive tendencies of the individual to act. Adams rightly asserts that "Incessant 'directed' activity leaves no room for the development of qualities that are essential for the true self-realization of the educand." (*Evolution of Educational Theory*, p. 155.) Hobhouse wisely remarks on this point that "To try to form character by coercion is to destroy it in the making. Personality is not built up from without but grows from within and the function of the outer order is not to create it, but to provide for it the most suitable conditions of growth." (*Liberalism*, p. 143.) We would do well to remind ourselves often that, as Fichte said, "The most original thing in us is the impulse to action. It is given before the consciousness of the world and cannot be derived from it."

Self-activity is the basis of self-responsibility and self control, which are the essential conditions of self-realization. Herbart greatly stressed the value of self-activity in realizing the many-sided development of the individual. There are certain instinctive propensities leading in the direction of self-activity, and such instincts must be exercised if the individual is to realize his own powers and his own weaknesses, which must be realized if he is to take any important part in the process of his own education, and as we have already noted, education is not a one-sided process. Education is possible only when the educand reacts in such a way as to bring out his own deeper meaning and purpose, and such meaning or purpose can be found only through self-activity. We must, then, give an important place to self-activity, but we are not to conclude that any amount of self-activity will of necessity produce an individual who measures up to the ideal which we have set.

Self-activity is a certain fundamental condition in the pro-

cess of education, rather than a completion of this process. Self-activity is necessary in order that a sense of self-responsibility may be awakened, and this sense of self-responsibility is a necessary condition of self-realization. Self-activity is, therefore, not an end in itself, but rather a condition of the individual's understanding his own limits and capacities. It is through self-activity that he measures himself against his fellow-men and the world, and so gets an estimate of the points of his strength and his weakness. It is through the exercise of the instinct moving in the direction of self-activity that the individual finds how closely he measures up to his competitors, and this is the germ of his sense of individual capacity. It is this self-activity, also, which leads to self-responsibility, for it is soon discovered that an individual is not only a being that acts, but one who is held accountable for his acts. He therefore awakens, through self-activity, a feeling of responsibility for the acts or deeds which he performs. Thus he begins to weigh his own conduct or pass comparative judgment on his acts, and this is the first absolute condition necessary for the development of character. We must come to see that not all acts are of equal value. They do not all tend to realize the end for which we strive to the same degree. They are, therefore, not of equal importance and the question of selection comes to be an important matter in conduct.

Only after self-activity has developed to the degree of self-responsibility is it possible for us to attain the ideal of self-realization in the individual. The individual at first considers the value of his acts in the light of their relations to others, or their effects in maintaining the relationship of harmony between individuals. Only after some maturity in the individual is it possible to substitute for this objective standard of measurement a more ideal standard, such as that of self-realization. But it is not possible for us to succeed in the highest possible degree in the development of the individual self until we have assisted him in setting before himself an ideal or purpose toward which he unconsciously strives, and in accordance with which he governs his own actions. We would say, therefore, that self-realization is to come about only through the exercise of the individual's own instinctive

tendencies toward action, and only after these tendencies have been organized in accordance with a plan, or ideal in life can the individual attain to his chief importance in life, or we would say find himself.

8 EDUCATION AND A PLAN OF LIFE. The chief business of education according to the ideal here expressed is that of helping each individual to realize his purpose in life, and through the realization of this purpose his own largest self is possible. Our ideal is that of self-realization, and the only possibility of attaining it is through self-activity which, under the proper direction and influence of the school, the teacher, and all others concerned in his education, naturally develops the feeling of self-responsibility. The pupil must be led to formulate a plan of life. He must see that a life that has no plan is a life that is not worth living. Plato said, "... the teacher should endeavor to direct the children's inclinations and pleasures by the amusements to their final aim in life." (*Laws*, p. 21.) Findlay says, "The school is adopted by the adult community as a vehicle for controlling values and ideals." (*The School*, p. 55)

If a life is to be made harmonious and significant it is possible only through loyal devotion to an ideal or purpose. This purpose we have suggested already to be most comprehensively stated in terms of self-realization. The pupil must be led to see that his most important task in life is that of finding his own interests and purposes, and through these his larger self-realization is possible. Without taking account of such individual differences in interests no such self-realization is possible. We must lead the pupil to see this. The whole atmosphere of the school must develop the feeling that each individual has as his highest duty that of finding himself, or his chief interests or capacities in life, and through development of these interests his highest self-realization. We must look for these ideal values in all parts of our experience. We must be taught so to seek and to find them, for they are contained in every element of our experience. There is grave question whether or not it is possible for any group of individuals to assert what parts of our experience, or what subjects of the program of study, will yield the largest

returns in educational value. We have seen that an attempt to do this is nearly always fatal because we fail to take account of individual differences.

The rule and motive of the school should be to help each pupil to find his interests and purposes in life, and on the basis of these develop a plan of life consistent with the larger view of ideal values. If the school does not help the pupil in the development of this plan of life, it has failed to perform its chief function. We must cease to regard it as the business of the school to realize the ideal values of life and feed these to the pupils through a siphon or a spoon, and come to the larger way of thinking and regard it as our chief business in the school to help a child to find his own life's interests and purposes, through the search for the ideal values as realized in the experience of the race and the individual.

9 THE VOCATIONAL AND CULTURAL IDEALS RECONCILED. There is another matter which ought to be spoken of in this connection, and that is the relation of the vocational and the cultural, or between the liberal and technical ideals in education. According to the philosophy underlying the theory of education here expressed, we do not make an absolute distinction between the vocational and the cultural, or between the liberal and the technical. We regard these two ideals as complementary to the larger ideal of self-realization. The present vocational tendencies in education have their meaning and significance in life, although I believe it is true that this significance is not always seen even by the most enthusiastic advocates in such lines of work. The vocational and the cultural are simply the expressions of two different ideals of life, ideals which are not essentially contradictory, but each of which contains a truth. The vocational tendency is quite in line with the expression of the doctrine of self-activity which was spoken of above. It may lead toward self-control and self-realization and it may not. Sometimes it does lead toward self-realization, but quite as often it does not. The vocational tendencies in education will always be productive of good, if they are to be regarded as natural expressions of individual interests and tendencies to self-activity, but which must lead on toward the realization of the larger and more universal

values of life. The vocational movement will always be productive of harm if it fails to see its own limits.

There is no satisfactory reason, deducible from reflection or experience, for supposing that vocational education need of necessity be narrow, and consequently fall short of the larger ideal of life. The practical educators must not lose sight of the fact that man does not live by bread alone. He lives the higher life on the basis of ideal values, which gain their significance by their comprehensive meaning for life as a whole. Practical education must ever be regarded not as an aim or an end in itself, but as the most valuable means for the realization of the ideal values of life for a very large number of individuals. There are individuals who do not find their highest self-realization possible through the pursuit of vocational or technical studies. There are others, however, who do find these lines of work most conducive to their highest degree of self-realization. There is a large class of individuals who find their own highest self-realization possible through the pursuit of the more liberal, or wrongly called, cultural lines of study. There is no subject which deserves to be called cultural that does not promote in the individual who pursues it the ideal values of truth, beauty, goodness, and religion. And on the other hand every subject which does promote the realization of these ideals in life deserves to be called cultural in the best sense of this word.

There is, then, no conflict between the vocational and the cultural, or between the liberal and the technical ideals of education. The only conflict lies in the unclear thinking of the individuals who swing to the one extreme or the other. There is a balance possible between these ideals, but such a balance can be realized only when we take the larger view of education, such as I believe to be expressed in terms of self-realization.

The great trouble with us in our modern day is in striking the balance between the liberal and the technical, between the vocational and the cultural. The vocational and technical, or what are often called the practical phases of education, should be regarded simply as means for the development of the individual's own chief interests and purposes in life, and through this development he must be led to see the higher

ideal values of life. Indeed it becomes his chief duty to realize these ideals in his own practical work. There is grave danger in the complexity of modern industry that the practical work leads to a narrow view of life, and consequently closes the doors to the individual who would attain the ideal values of life. I do not see that such a condition is inevitable, however. If we regard our technical and our practical life in its relation to life as a whole, we see these parts in their proper significance and value. We thus restore to each fragment of our experience its meaning through our perception of its relation to the whole of which it is part. It is just this training of the individual that enables him to perceive each fragment of experience in its relation to the whole that gives life its significance and value. There is, then, no reason for regarding the industrial occupations as necessarily narrow, and there is no more reason for regarding the so-called cultural or liberal subject as broad. Indeed, some of the liberal subjects are narrow and contracted for certain individuals, whose lives gain significance in both breadth and depth, if they were allowed to turn their attention in the direction of some practical line of work. The distinction between vocational and cultural, or liberal and technical, education must either be given up entirely, or else we must distinguish more clearly than we have done in modern practice between the views.

10 SUMMARY. Let us now briefly survey the contents of this chapter in order that we may see more clearly its significance for the whole. In attempting to show the relations between the aim of self-realization and educational practice based upon this aim, we began by pointing out some significant relations between theory and practice generally. We concluded that theory and practice are not contradictory. Theory is rather the attempt to explain the meaning of the fragmentary parts of our experience. It is the true theorist who sees each element of our experience in its relation to the whole. It is, therefore, the theorist who is most likely to see things in their proper proportions. It is not true that the one who is ultra-practical, and who does not work with a definite theory in mind, is the most valuable man for society. Nor

is it true that this is the type of individual who is likely to realize his larger self to the highest degree. On the contrary the man of theory is the one who is most apt to see life as a whole, and each part of it in its proper perspective, and, therefore, keep the balance and proportion which is necessary in every life and in every part of our experience. We made application of his view to education and asserted that education, quite as much as life as a whole, is in need of a fundamental theory which gives direction and significance to the parts of our educational experience. Indeed we saw that the relationship between a larger theory of life as a whole, and that of education as a part, is so close that in order to see the real meaning of our educational experience, we must see it in the light of a larger theory or philosophy of life.

We attempted to break down the artificial distinction between the actual and the ideal by showing that the actual stands to the ideal in the same relation that a part of our experience stands to the whole. The actual, or the fragment of our experience, has meaning and significance not in itself, but in its relation to the whole. We next considered the value of an ideal for life, and showed that such an ideal is an essential condition of a valuable life, or the essential condition for the development of the highest degree of character or personality is that the individual possesses a definite ideal, which enables him to formulate a plan of life. He must be allowed to carry this plan of life out in accordance with his own individual interests and purposes, through his own activity, or the exercise of his own instinctive interests and capacities or abilities. It is through such self-activity that he comes to express judgment as to the value of his acts, and consequently to develop a sense of self-responsibility and self-control through which the ideal of self-realization is made possible.

We regard it as the chief business of the school to conform to this ideal, and to assist each pupil in developing a plan of life, in accordance with his own interests and purpose, and through the recognition of the significance of each part and fragment of experience to that of the whole. This plan of life may be worked out best by some individuals in the pursuit of the vocational and the practical ideal, while others may best attain their ideal in life through the pursuit of the cultural

and liberal studies of the program, which are not so directly concerned with the occupations of life. We are to take account of these differences in individuals in the formation and administration of our program of studies, otherwise we will fall short in the case of others. We do not regard vocational or cultural education as contradictory in any sense. Such a confusion arises in unclear thinking. They are only different ways of arriving at the same goal, the ideal values of life, through which alone we are able to perceive life in its significance, and to realize the highest degree of self-realization through individual work. Professor Findlay aptly remarks that "If in modern time a sharp antithesis has been discovered between liberal and technical education it is only because men have failed to see how intimate is the alliance between the two; the ends both of vocation and of leisure need to be pursued in unison, if not always in conjunction". (*The School*, p. 157.) Dutton and Sneddon utter what seems to me to be a vital truth when they say that "Vocational efficiency is fundamental to cultural and social efficiency." (*Admin. of Pub. Edu. in U. S.*)

CHAPTER V

THE TEACHER AND THE RECITATION

I THE TEACHER AS A FACTOR IN THE EDUCATIONAL PROCESS. In this chapter we are to concern ourselves with the teacher and the recitation as factors in the educational process. In the following chapter we shall be concerned primarily with the school organization as a factor in this process.

The teacher must always be regarded as a fundamental factor in the process of education. She is the artist who brings about the proper adjustment between aims and means in education. We have noted already how important the function of supervision is in the educational process. There must be some one who keeps his eye on the ideal goal to be realized throughout the educational process, and he must be able to see the means, methods and organization necessary to effect the purposes he sets out to reach. But in the last analysis it is true that the teacher plays the important rôle of actually adjusting means to ends so far as the classroom is concerned, and we must here assert that no amount of organization will take the place of the real teacher. On the other hand, it must not be forgotten that the best teacher can realize the highest possibilities only through effective organization, that is, organization well adapted to the realization of the aims for which the school exists.

The pupil-teacher-contact which is possible in education to a higher degree than anywhere else, is the most important point of contact between the school and the pupil. It is the recitation which provides the best opportunity for developing this relationship, unless it be on the playground. But with the older pupils the playground does not afford as good an opportunity for the development of the proper relationship between pupil and teacher as does the recitation. The recitation has always been regarded, and must always be regarded,

as a very important factor in the realization of whatever aims the school strives for. Professor Palmer speaks to the point when he says, "So conditional on morality is the process of knowing, so inwrought is it in the very structure of the school, that a school might well be called an ethical instrument and its daily sessions hours for the manufacture of character." (Palmer: *Moral Inst. in the Schools*, p. 29) But it must not be forgotten that the most important factor in the recitation viewed from one side, is the teacher herself. The teacher with her broader experience and more completely developed self, should be in a position to understand the pupil and his needs better than he understands himself, and this understanding should lead to a greater interest, sympathy, and appreciation of the child and his point of view. The most important obligation which rests upon the teacher as a factor in the educational process is to assist pupils to find themselves, to help them find out their own deeper purposes in life. It is only through such discovery that the pupil's real native capacities and abilities may be developed, and consequently his larger self realized. There is no obligation that rests upon the teacher greater than that of helping the pupil to make this self discovery. In fact all of the organizations, machinery, and recitations of the school system are as means to this aim which we have defined as the highest aim of every individual life. Professor Ladd, I take it, means the same thing when he says, "... the culminating function of the professional teacher is the making of a person, or self". (*Teacher's Philosophy*, p. 134)

The teacher must not only view the child from her own larger experience which enables her to see his capacities and powers, but she must realize fully that it is her primary function to help the child to see these possibilities for himself. The teacher cannot always determine the capabilities of the child. This must be determined by the interests and purposes of the child as manifested through his activities in school life. The things to which he gives his attention are those things which more than likely will aid most in his process of self-realization. It is the business of the teacher to make these discoveries as to the pupil's chief interests and then help the pupil to realize them himself. In its best sense this is what we mean by

individual reaction to experience of the school life. The teacher must help the child to find the center of his own interests and purposes in life, and from this aspect to view all of life's experience.

I am not advocating over-specialization, or premature specialization, but I do urge that every individual be led through the influence of the teacher and the process of education generally to find his central interest in life, and once he has found this interest the teacher must help the individual to view life as a whole from this angle. In no other way is connected and related experience possible. We have seen already that life has no value except in its relation to our will and purpose as the center and ultimate reality of life and the universe, and we must not forget this broader truth when we step into the practical work of the class-room. The teacher can never afford to give up her primary function in life, that is helping immature beings to find their own deeper wills and purposes, in other words to find the things in life in which they have the greatest interests, and through these interests to assist the individual in realizing the larger values which are over-individual and ideal, and hence universal in their nature. The highest degree of self-realization is possible not until we have reached these superior heights of ideal values. We have only begun the process of self-realization so far as the pupil is concerned when we have helped him to find his purpose in life. We must go on and help him to see how the larger and more ideal values of life are to be attained through the expression of this individual interest.

It is the function of school supervision to keep constantly in mind the relation between aims and means and to keep the whole system of education moving in the direction of the proper ideal of life. It is the business of the class-room teacher to take part in this great process, and upon her rests the responsibility of immediately assisting the child toward this highest degree of self-realization, through the wider experience of the school and the influence of the teacher and pupils.

2 THE RECITATION AS A FACTOR IN THE EDUCATIONAL PROCESS. We have noted already the importance of the

recitation as a factor in the educational process. We must now suggest that it is in the recitation that the teacher realizes to a large degree her chief function as a teacher. It is here that the teacher brings together the aims of education, and the means through her own activity as a teacher, and it is also in the recitation that the teacher has the best opportunity through the self-expression of the individual pupils to help them find their own interests and purposes in life. The recitation also affords an opportunity for interchange of ideas, and for discussion which make it possible to see our own purposes more clearly and to define our deeper relationship to the world in which we live.

Through the subjects offered in the program of study it is possible to arrive at a broader conception of the experience of the race. It is possible to see the failures and successes of men in the past and to see what contributions they have made to the present. We are thus able to get a larger view of the universe, and through this perspective to see our own relations to it more clearly, and this aids to a very large degree in the determination of our own purpose in the world. It is in the recitation that these facts and these larger views are brought to light through discussion. I am led to say that the primary function of the recitation as a factor in the educational process is to provide an opportunity for the free expression of the individual opinion, and for the mutual discussion of topics that have a common interest. It is through such free expressions and discussion that we come into possession of our own better self. The recitation carried on in this fashion will not stop with a mere consideration of the facts and laws of our experience, but it will go on to a consideration of their meaning.

If the recitation stops short of bringing the pupil into a broader and more sympathetic relation with his environments and the world in which he lives, it has missed its real purpose. It seems to me to be really pathetic, when I observe a teacher who seems to have as her highest aim in the recitation that of imparting certain knowledge of facts and laws of our experience. We have noticed already that this casual view of the world is essential, but it is only a means to an end and must not be substituted for the end itself. We

should not stop with the knowledge of facts and laws, but show their meaning and significance for life. This is the only way that we can make our recitation work have real significance. Facts in themselves, and the laws governing these facts, do not have any meaning for life except in so far as they are viewed in the light of life as a whole. But it is so easy to forget this when you get into the class-room. Often we congratulate ourselves on the fact that our pupils have learned much from certain books, not stopping to ask ourselves whether or not they see the relation of these facts for life, or whether the knowledge so derived leads the pupil to heights from which he can see his own relation to life, in other words to attain the ideal of self-realization.

We must sooner or later get over this pernicious habit of substituting means for ends, and it is in the hope that such distinction may be made clearer that this volume has been written. There is no real excuse for such confusion. The knowledge of facts can never be substituted for the real aim of education. It is often so substituted for the very reason that some end or other must be striven for and if our insight is not sufficiently penetrating to see the real aim of life we substitute for this real aim an artificial one. That is, we substitute a means for the end and reap the disaster which inevitably follows unclear thinking. The future of our educational experience will bring to light more clearly the folly of such confusion and it will point to a new day when a clearer vision will eliminate all such confusion. Then, and not until then, the aims and means will find their respective places as whole and part in the universal process of life.

3 EDUCATION THROUGH DIRECTED SPONTANEOUS ACTIVITY. We have suggested the importance of the teacher and of the recitation in the educational process. It must now be emphasized that the only way through which the recitation may serve as a valuable means to self-realization is through that of self-activity. Every child is endowed with certain interests and instincts which motivate his being. It is the business of the teacher to discover these spontaneous activities and give them shape and guidance. Self-activity alone will not reach the aim of life. There is no assurance that self-activity or

unguided play will even assist the individual toward his highest self-realization. On the other hand his immaturity points to a certain deficiency in his nature and suggests the necessity for supplementing this deficiency by the larger aid of the larger experience of the teacher. If the individual is ever to realize his ideal through activity or play, it will not be through free or undirected play. The activity of the individual must always be directed toward a definite goal. It is not by activity or play, but directed activity through play that the child will attain his ideal. We have already gone too far in the matter of free and unrestricted play of children. We do not want hampered activity to be sure, but we do want the activity of the child to be so directed and governed that his possibilities of self-realization will increase through the exercise of this part of his nature. I believe that Montessorism has already done or will do an important service for education. I do not believe that this service is in the direction that a great host of people seem to think. On the other hand I believe that this pedagogical doctrine will point to the folly of undirected play. We must guide the child, and the only excuse for such guidance is the fact that he is not able himself to take charge of his own direction. Now it is not only with the younger children that this statement applies. Some who are beyond the age we call children are still in need of this help and direction. Without it the possibilities that the individual will find his true purpose in life, his larger self, will be greatly decreased.

4 IMPRESSION AND EXPRESSION. The teacher and the recitation will perform their service as factors in the educational process only when we take account of the important principle that such direction and guidance as has been suggested above is regarded as absolutely essential to the end that the individual may find himself.

The fundamental point in method is that the child be given an opportunity to express his own interests. Much harm has been done by forcing children to conform to certain cramped methods of speech and certain restricted modes of expression. We must get away from all this nonsense and attempt to find out what the child's own real interest in life

is, and allow him to exercise this interest in his own way. As teachers we cannot assist pupils to find their own purpose until their interests are discovered through individual initiative. The child must first express himself before his own interests and purposes can be determined, and such interests must be determined before any high degree of self-realization is possible, for self-realization is possible only through the development of the individual's own inner purpose or interests in life.

In our school work impression and expression must go together. There has been too much impression and too little expression in the past, with the result that the impressions have not been as lasting as they should have been, or at least have not contributed as much as they should in the development of the individual's own interests and will. When once we have found the child's interests we must assist him to free and unrestrained activity in the realization of the ideal values, which realization is possible only in so far as we take account of these individual interests. Instead of making the chief methods of the recitation that of impression, it would be better if we would reverse the process and give more attention to expression, for it is only through expression that the child can be led to find himself. This is our only source of help in finding out the real interests of the child. If he never said anything or did anything in life, how could we find out his purpose? It is not true that the child is to be seen and not heard. On the contrary we must see and hear much of him if we are to stand as his guide and teacher in life.

It is not to be inferred from the foregoing that there is no limit to the amount of help that the teacher should give the pupil. On the contrary there is grave danger lest too much help of the wrong kind be given, and that the will of the child be left flabby and incapable of self-direction. As we have noted, this self-direction is indispensable to a high degree of self-realization. There is no better way of developing self-control and initiative than through that of affording ample opportunity for self-expression. And this is desirable, for without it the child cannot be led toward the highest ideal of education which is the realization of the highest values of life. Impression and expression are not different processes, but rather they are the opposite aspects of a larger process of the

recitation. It would be dangerous to separate the two. They are complementary processes and must never be isolated any more than the logical methods of analysis and synthetics should be separated. The child learns by doing, for in so doing he is given an opportunity to express himself. The inner and the outer world of the child must not be separated, but rather they must evolve together. A child is bound to get a false notion of the universe as soon as he is led to make too sharp a distinction between himself and the world about him. On the other hand it is through the exercise of himself in his relations to this environment, to the universe of which he is a part, that there evolves in his mind a higher conception of his relation to the universe as a part of the organic whole.

All the immediate aims of the class recitation must allow for free and full expression of the pupil. In our teaching of new facts we must offer an opportunity for reaction on the part of the pupil, and it is only through such reaction that we perceive the relation of these facts to the larger world of experience. In our testing and drilling as well as our teaching, we must offer freer opportunity for the expression of individual initiative. We have noted already that we are different by nature and surroundings, and these individual differences must always be taken account of in the attempt to realize the special aims of the class-room which have been designated as teaching, testing, and drilling. We must harmonize our conception of all of these aims in their relation with the ultimate aims of self-realization. Teaching is not merely the cramming in of facts; it is rather the conception of the relation of the individual facts to the larger stock of knowledge which the pupil already possesses.

5 THE DOCTRINE OF INTEREST AND APPERCEPTION. In the section above we have suggested the importance of the knowledge which the pupil already has. This is another way of stating what the psychologist means when he says that in teaching we must always bear in mind the law of apperception. We cannot teach new facts unless we show their relation to the old, and this relation can be perceived only in so far as the new facts can be interpreted in the light of what the child already knows and understands, as a result of his

interaction with his environment, through the free expression of his own individuality.

The doctrine of interest is essential in the process of teaching. It is not possible for us to teach a child new facts unless he take account of what he knows already; in other words, unless we recognize the law of apperception. Neither is it possible for us to teach the child new knowledge unless we take account of the laws of interest. The child is interested in that which relates to his own experience. If we take proper account of the law of apperception, there will be little difficulty in the matter of arousing interest in the subject matter presented to the pupil, or in the enlargement of his experience and the deepening of his insight into the real values of life. The child is interested not in the isolated fragments of life, but rather in those which relate to his own personality and experience. If we can succeed in arousing interest in the child, and our only possibility of doing so is to take account of the laws of apperception, then we need not fear as to the result of our teaching. On the other hand, if we disregard the laws of interest, the child does not properly react; that is, he does not give his attention and the result is a loss of time and energy and the failure to place the facts of experience before the child in such a way as to make them serviceable in perceiving more clearly his relations to the world in which he finds himself.

There is always the danger that an unwise teacher will push the matter of interest in the direction of purely temporary desires. Professor Münsterberg remarks to the point when he says, "The school methods which appeal always to the neutral desire and the involuntary attention and interest do not train the pupil in overcoming desires and in controlling attention; they please instead of commending; they teach one to follow the path of least resistance instead of the path of duty and the ideal." (*Psy. and Teacher*, p. 77) Professor Ladd says we have gone too far in the direction of making school instruction "attractive and easy for instructing those undergoing the process of education." (*Teacher's Practical Phil.*, p. 78)

6 THE PROBLEM OF DISCIPLINE. The problem of

discipline vanishes as soon as we take account of the law of interest. We are not likely to be troubled with a child who has been led to the foundation of knowledge and who there drinks with interest the experiences of a larger life. On the other hand, if the child is not interested in the work that he is doing, he is bound to be troublesome. Where there is no interest there is no center or focus of attention, no abiding purpose, and the result is distraction of attention with the consequent troubles that we call problems of discipline. It was left to Herbart to point out to the world that the problem of discipline decreases in direct proportion as interest is awakened in the subject matter of instruction, and in the school life as a whole. The great criminals in the world are not those who have held clearly in mind the meaning of life and their significant relation to it. On the contrary, they have ignored just these essential relations which the ideal of self-realization places on the foreground, and have regarded themselves for the moment of their misdeed as separated or isolated parts of the larger life of which they are only a part. Briggs says, "Once get a deep, high loyalty, and the problem of discipline is gone." (*Routine and Ideals*, p. 179.)

We will not be able to awaken a deep interest in the child unless we have found the center or core of interests in his life. Having found this center of his life, it will be possible then to relate the facts of experience to his own life in such a way as to cause them to take on greater significance by showing to the individual his larger relation to his fellow men, and the world at large. There would be much less criminality in the world if the schools that have exerted an influence on the younger lives of these perpetrators had succeeded in helping them to find their place in life, through the expression of their own individuality. We seem to recognize this fact in modern society, but the trouble is we do it too late. After the individual has committed his crime, we confine him to an institution which provides a variety of trade and industrial work, and there we assist him to find himself and thus enable him through some work of life to make a living, with the result that many times criminals are cured of their evil propensities through this means of treatment, or I should say, education. Why do we not do this in the schools before the evil days

have come upon these unfortunates? If we would do so, we would greatly reduce the number of commitments to these institutions for delinquents. But we are getting wiser, and no doubt we shall in the near future see our mistakes and rapidly make amends for them.

7 CONNECTED THOUGHT AND CLASS METHOD. There is another matter to which we must call attention at this point. The child will never be able to live a consistent and well organized life unless his thoughts have also been organized; unless he is taught to organize and systematize his thinking in accordance with the fundamental principles of logical thought, the child will not be able after leaving school to think either very consistently or very deeply. He will, therefore, be deprived of one of the absolutely essential conditions of his own highest self-realization,—that of clear, consistent, logical thinking. It is, therefore, as important that the pupil's work shall be guided by a "fusing principle" (cf. p. 141) as it is that the teacher be guided by such a principle. Professor Adler well says that "To strengthen the will, therefore, it is necessary to give to the person of weak will, the power to think connectedly, and especially to reach an end by long and complex trains of ideas." (*Moral Instruction of Children*, p. 260)

The habits that are developed in the child in his school work will follow him through life, as a general rule. The habit of unclear thinking is one of the habits that handicap an individual, and make the highest degree of his self-realization impossible. We must, then, exert ourselves to see that the methods which we employ in our classes, and all the work of the school, lead to the development of habits that are conducive to clear and logical thinking. A muddled or cloudy brain is not an instrument through which an individual is likely to realize the ideal values of life, or the best interests even of his narrower self. If we take away from the world the power of clear thinking, we deprive it of the essential condition of human progress or development, which is possible through individual self-development.

All the work of the teacher, the recitation, and of the school as a whole, must promote in the highest possible degree

this ideal of clear thinking. This is one of the immediate aims of the school. In this connection it must be said that such clear and consistent thinking is not possible, except as it goes on in a being whose body is also properly functioning, or organically related throughout its parts. Clear thinking and healthy bodies naturally go together. It is impossible for the individual to realize to the highest degree the capacity for clear thinking unless his body is kept well and healthy. It is, therefore, not only consistent with the idealistic conception of self-realization as the ultimate aim of education that we have a healthy body and a clear mind, but it is made one of the absolute conditions upon which the realization of such an ideal is possible.

8 ORGANIZATION OF INTERESTS. We have seen from the foregoing that it is not possible for the pupil to realize his largest self unless the various factors of the school all co-operate to the end that his interests in life be organized around some definite purpose. The greatest thing that the school can do for the pupil is to help him find this central interest in life which will enable him to relate all about it. The most valuable asset to the development of a strong and noble character is that of a definite purpose or interest in life. It is through the relation of all interests to this central purpose and the final relation of all of these interests of life to the ideal values of life as a whole, that self-realization is made possible and real. Professor Royce well says that "An explicit personality is one which shows itself through deeds that embody a coherent ideal." (*William James, etc.*, p. 290)

Much of the work in the school of to-day is of such a nature as to prevent the development of personality instead of promoting it. The work is so disorganized and the school as an organization is so incomplete, that it is practically impossible for the pupil to succeed in the development of a definite line of interests. We have always noted that it is impossible for a person to develop a definite purpose in life unless conditions are such as to aid in the development of consistent logical thinking. Our class methods must be of such a character as to promote this connected way of thinking.

We must teach in such a way that we take account of the law of apperception, always relating the work of the class to the pupils' interest. We must change from the logical procedure of the past to the psychological. Up to the present time we have been concerned mainly in the logical development of subject matter, rather than with the relation of the subject matter to the interests and needs of the child.

9 THE UNITY OF PERSONALITY THROUGH SELF-REALIZATION. It is through the organization of the school, the teacher, recitation and the program of studies, as well as the other activities of the school, that the pupil is led to find his interests in life, and once having found these interests, the factors must co-operate to the end that the pupil be developed to the highest possible degree through their influence. One who thinks clearly and connectedly also will have a definite organization of life's interest and purposes. It is through such consistent thinking that the unity of personality is made possible, and our aim should be to strive always for such self-realization, the organization of our own deeper purposes.

10 SUMMARY. In this chapter we have shown the various factors that must co-operate in the development of the personality of the pupil. The teacher, the recitation, the program of studies, all must co-operate to the end that the child be discovered in his real nature. Having been discovered, it is the aim of the school to assist his largest and most complete self-development. Through directed spontaneous activity and the freedom of expression, the child is led naturally to discover his own possibilities, and once having discovered these, it is the business of the various factors of the school to help the child in the larger self-realization.

We cannot succeed in awakening the child's interest unless we take account of the laws of interest and apperception. If we relate the experience of the race to the experience of the child in such a way that it becomes meaningful to him through his own self-expression and activity, he will appropriate this larger experience as part of his own rightful inheritance, and through the aid of this larger view of life he is brought to a higher degree of self-realization. The problem of discipline

vanishes as soon as we find the true interests of the child. We must not forget these points in our actual experience. We must remember that our aim is the unity of personality through self-expression directed toward the ideal of life. Through such directed activity the child may be led to a larger appreciation of life, and to appropriate as the most significant part of his experience the ideal values of life, and through loyal devotion to those ideals the pupil may attain the highest aim of life,—that of self-realization.

In our efforts to realize this ideal, we will often make great mistakes, but we must not grow discouraged but loyally struggle on. Phillips Brooks saw well the meaning and worth of such loyalty to our ideal when he said, "It seems to me there is no maxim for a noble life like this: Count always your highest moments, your truest moments. Believe that in the time when you were the greatest and most spiritual man, then you were your truest self."

CHAPTER VI

CONCLUSION

1 SUMMARY. We have come now to the point when we must briefly summarize the result up to the present time, and make a few suggestions as to the future outlook for educational theory and practice. We have come to see that educational theory cannot be separated from a wider theory of life. Viewing the matter of education from the aspect of purpose, meaning, and value, we are concerned with the broader philosophy of human experience. When we view it from the angle of the connections of the various parts of our experience in an external way, we are concerned with the scientific aspects of education. Philosophy is concerned with the meaning and value of our educational experience, with our aims and purposes. Science is concerned with the means and methods whereby we realize these aims.

We can look at education from various philosophical aspects. From the metaphysical point of view, we regard our educational experience in its wider relation to reality as a whole. From the epistemological point of view, we are concerned with the nature and limit of knowledge. From the logical point of view we are concerned with the ultimate standards of truth, or with the wider truth relations of our educational experience. From the æsthetic point of view we are concerned with education in its relations to the ideal of beauty. From the ethical point of view, we consider education in its relation to the ideal of goodness, or the highest aim in life. From the religious point of view, we are concerned with education not as a time and space process merely, but in its wider connections with time and space. Thus we see that education cannot be separated from the wider theory of life as a whole. It is intimately bound up with the normative and the descriptive sciences.

From the descriptive point of view, we are concerned with

the various means and methods to be employed in the service of the ideal values of life. We have spoken of these means as being contributed by the various descriptive sciences—psychology, biology, sociology, economics, and others. These sciences all contribute knowledge or information without which it would be impossible to realize in the highest degree the aim of education. We, therefore, come to the conclusion that philosophy and science are not in necessary conflict, but on the other hand, they are complementary aspects of life as a whole, philosophy offering us the aims and purposes of life, while the descriptive sciences give us the means through which they are to be obtained. We concluded that self-realization is the aim and chief motive of our life in its deepest will aspects, and that a knowledge of these sciences is necessary to the end that self-realization be made possible through the service of the ideal values of truth, beauty, goodness, and religion. We concluded also that these ideal values are to be realized by each individual in his own way.

2 EDUCATIONAL READJUSTMENT. We have expressed the notion that the distinctions here mentioned between aims and means in education, or between the normative and descriptive sciences, are not always kept clearly in mind, and hence confusion arises in our modern pedagogy. We have suggested that the only way to clear up this conflict is through clear philosophical thinking.

Our educational system to-day is in need of re-organization, in order that we may take account of the best that has been developed through our philosophical reflection and our scientific discoveries. It is not an uncommon thing to find aims and means warring with each other, or to find several aims working at cross-purposes, or to find means and methods unwisely chosen and ill-adapted to the service of any aim, for the reason that these aims are not clearly held in mind.

3 PHILOSOPHY AND SCIENCE AS A BASIS FOR EDUCATIONAL THEORY AND PRACTICE. This reorganization which we have suggested as desirable and necessary, must come about through regarding education as a part of the larger experience of life as a whole. The only way to remove education from

the basis of common sense theory, upon which it too largely rests at the present time, is to consider our educational experience in the light of the larger view of life, and on the basis of such reflection determine our aim or purpose. Once we have gone so far as to establish an aim of education consistent with the view of life as a whole, it will be possible for us to call upon the various descriptive scientists in order to ascertain all the knowledge which they possess, and to use this in the service or realization of the ideal values of life. Everywhere the "large underlying problem is the same,—how to make the great new industrial and commercial forces the servants and not the masters of society." (*World's Work*, Sept., 1911, p. 1479)

I believe that there are signs of a better day in education. I think the people are coming to see the folly of relying upon the descriptive sciences alone to give us the meaning and value of life. We have learned already that such a thing is not possible through the descriptive sciences.

4. EDUCATIONAL GUIDANCE. We have seen that the chief business of the school is that of helping the pupil to find himself, this being the necessary starting point for the most complete realization of himself in the process of education. Too little has been done in the past to help the individual to find himself, and consequently the school often has been an ineffective instrument in helping the pupil to realize his true purpose in life. In the future the development of our reflective thinking will show us the folly of such a procedure. I believe the day is not far off when philosophy will contribute to the end that we regard the development of the child's own interests in life as the highest service which the school can render him, and to this end the descriptive sciences will be of great service. We will regard vocational guidance as a practical necessity and this as a result of our philosophical conception of the worth of the individual, and of the necessity of helping him to find his real meaning and purpose in life.

5. ORGANIZATION AND EFFICIENCY. Another matter which future development will no doubt bring about is that of increased emphasis to be laid on the side of organization.

In the past, we have overemphasized the necessity of having great personalities at the head of our educational system to the neglect of the very important matter of scientific organization. I believe with Frederick Taylor, one of our greatest engineering experts, that the future development in the world at large for some time to come will hinge largely on the importance we attach to the factor of organization. It is impossible for a person to realize his largest possibilities as an individual unless the organization in which he finds himself contributes to this end also. Ineffective organization means the failure to adapt means to ends. In the future we will not find excuses for poor organization, just because we think we have an important personality at the head of our school system. We must always stress personality, for it is the most valuable thing in all the world, but we must not forget the important fact that the more ideal values and purposes of our life are not attainable unless we select the means which are appropriate for the realization of these ends.

6 THE SCHOOLS OF TO-MORROW. In the schools of to-morrow we shall see an effective organization composed of the factors of teacher, pupil, parent, program of study, organized activities, and all other factors contributing to the larger organizations of the school, co-operating as a unit for the realization of the more ideal values of life, which are to be seen through clearer reflective thought. The teachers in the schools of to-morrow will be better prepared for their work. They will have both a clearer vision of the worthy aims and purposes of life, and a better scientific equipment as the necessary means for the realization of these ideal values of life.

Up to the present we have left out many worthy interests in education are bound to assert themselves in due time and make reorganization necessary. Professor R. B. Perry says truly that, "Interests left out of account inevitably will assert themselves, and through their steady pressure or violent impact destroy the organization which has excluded them. Hence the need of an order that shall provide for its own gradual correction, stable enough for security, and pliant enough to yield without shock to the claims of neglected or abused interests." (*The Moral Economy*, p. 164)

The most vital interest that has been left out of account is that of the individual himself, but the signs of the times point to a better day. Professor Münsterberg says that, "The signs are clear indeed that the days of idealistic philosophy, and of art, and of religion, are approaching; that the world is tired of merely connecting facts without asking what their ultimate meaning is. The world feels again that technical civilization alone cannot make life more worth living. The aim of the last generation was to explain the world; the aim of the next generation will be to interpret the world; the one was seeking laws, the other will seek ideals." (*Psychotherapy*, p. 3.)

Idealism must come to the rescue of the schools, or rather the individual. It always has exerted a great influence, but it will do a yet greater service for the future. Professor Horne asserts the same truth, when he says "Education is the purposeful providing of an environment; at bottom it is personality in and behind the environment that counts most; so educating is really a relation between personalities of different degrees of maturity.

"If these views are correct, it is evident that idealism is the true philosophy in educating. The relation between teachers and pupils, being personal and reciprocal, is something more than materialism either can allow or explain, than commercialism of trade can understand, than any form of egoism can attain." (*Idealism in Education*, Preface, p. VIII)

Let us hope that the future will not lose sight of the individual in the confusion of aims, and means, but rather let us hope that a clear vision is near at hand, and that it will aid in clearing up the present confusion of aims and means in education and restore to the individual his own rights, as defined by his relation to the universal experience, and made possible through his own self-realization as determined by the degree to which he has made the absolute values his own.

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- Bain, *Education as Science*.
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- Henderson, *Text-Book in the Principles of Education*.
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I HISTORICAL ASPECTS

- Alexander, B. D., *A Short History of Philosophy*.
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- Baldwin, *Dictionary of Philosophy and Psychology*.
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I METAPHYSICS

- Bowne, *Metaphysics: A Study in First Principles*.
 Bradley, *Appearance and Reality*.
 Deussen, *The Elements of Metaphysics*.
 Fullerton, *A System of Metaphysics*.
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III LOGIC

- Atkins, *Principles of Logic*.
Bosanquet, *Essentials of Logic*.
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Hibben, *Logic: Deductive and Inductive*.
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Russell, *An Elementary Logic*.
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Welton, *Logical Bases of Education*.
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- Bowne, *Philosophy of Theism*.
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- Bosanquet, *History of Æsthetics*.
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- Hogart, *The Analysis of Beauty*.
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VII PRAGMATISM

- Bergson, *Creative Evolution*.
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 Pratt, *What Is Pragmatism?*
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